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# The Relationship between Emotional Intelligence and Leadership in Business Management of Greek Pharmaceutical Companies

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## Abstract

This research purpose has to do with a theoretical communication model, having as main participants of the research, supervisors, middle and senior managers, working for Greek pharmaceutical companies to derive & comment the following data: The recognition and administration of Emotional Intelligence that incorporates self-awareness, self-management, social management and social awareness among the participants, The recognition and administration of Emotional Intelligence traits i.e. self-awareness, self-management, social management and social awareness among the participants that express communication abilities & leadership effectiveness to a large extent among genders, males and females, The recognition and administration of Emotional Intelligence traits that express communication abilities & leadership effectiveness to a large extent among ages' groups, The recognition and administration of Emotional Intelligence traits that express communication abilities & leadership effectiveness to a large extent among ages' groups. In practice, the aim of this research will lead to the development of the above

mentioned theoretical communication model which incorporates the existence & use of all Emotional Intelligence traits in the pharmaceutical sector as valuable contributors in leadership effectiveness, decision making processes. Based on the abovementioned reasons, a specific questionnaire was formulated and distributed to 250 specialized pharmaceutical professionals after having been adapted accordingly always based on existing data of Pharmaceutical Market in Greece; in order to guide us to relevant conclusions about importance of Emotional Intelligence for the Greek pharmaceutical companies. Another aspect of the answers for that set of questions addressed to senior or middle level managers might lead at the same time to the assessment of emotional intelligence value in the context of communication with other members of the team & also subordinates. Therefore, we believe that this specific study will be an additional tool available for pharmaceutical companies' executives since it focuses on the usefulness and application of Emotional Intelligence incorporated in the communication model of leadership effectiveness, decision making processes that are associated with profitability and generally professional progress.

**Keywords:** Emotional Intelligence (EI), Pharmaceutical Companies, Leadership Effectiveness, Decision Making Process.

## Introduction

Emotional Intelligence (EI) used to be an almost new academic concept that was analyzed by Salovey and Mayer (1990) in their so-called study of Emotional Intelligence. Salovey and Mayer (1990) expressed the meaning of EI after defining the meanings of emotions and intelligence separately. A hierarchical model of EI was also given, which incorporated four different traits i.e., understanding and presentation of one's emotions, understanding and presentation of others' emotions and consequently the regulation of them and utilization of this emotional data in thinking and inspiring others (Salovey and Mayer, 1990). Later on, Goleman (1995) dealt with this topic in his excellent book called "Emotional Intelligence" which caused interest to the worldwide audience. He really expressed emotion as an "impulse to act, the instant plans for handling life that evaluation has instilled in us" (Goleman, 1995). Goleman was characterized as the first writer who connected EI with successful leadership in business administration and approved that EI was the principal data of differentiation between the great leaders and average leaders (Goleman 2006). Despite the existence of numerous traits and elements of the leadership behavior, a prominent focus has been made to the characteristic of Emotional Intelligence (EI), which has to do with the capacity of an individual to feel and attend to one's own emotions and those of others (Mayer, 1999). As a matter of fact, EI in the workplace has driven a lot of attention over the past decade (Tofighi *et al.*, 2015).

Based on researchers' aspect, leadership together with organizational achievement are importantly improved by EI level increase (Jordan and Troth, 2011). In fact, leaders with high EI score can focus on emotions so as to strengthen their organizations' performance (Hernon and Rossiter, 2006). The establishment of future leaders by exploiting the existence of EI may be fulfilled through personality/behavioral preference models such as Myers-Briggs Type Indicator® (MBTI®) and DiSC® (Higgs,2001). EI becomes almost easy to be calculated with standardized and validated assessments, and it is generally thought that EI may be grown by using training and effort (Goleman, 1995). Emotionally Intelligent leaders very soon obtain positive and encouraging attitude in their professional relationships (Glasser, 1998). They can also make others feel that they are necessary and valuable within the corporate bodies. These leaders can be characterized as sensitive and perceptive; they know that life is strongly governed by emotions. As a result, they manage employees in a more different way than those leaders that are less sensitive.

Therefore, it is not by luck that EI has been stated as an important factor of workplace performance, with job satisfaction and organizational success to be incorporated in it (Carmeli *et al.*, 2009; Law *et al.*, 2008).EI mainly increases the performance of a leader (Cherniss and Goleman, 2001). A leader who is discerned by a high level of EI affects more positively team members within organization than a leader marked by a low level of EI (Cherniss, 2003). In a great number of organizations, top level managerial people promote EI not only as the most important element of organizational success, but also as an appropriate component of the company's managing process (Feather, 2009). Feather argues: "A vital portion of the development of leaders in achieving success is to develop and enhance their level of emotional intelligence."

Moreover, Humphrey (2002) said that researchers are strongly interested in the fact that leaders who can better recognize the emotional situation their subordinates are in and also motivate more positive emotional state in the groups they manage, become far more effective than others. Also research managed by Sosik and Mergerian (1999) and Jones and George (1998) has also explained that connection on an emotional state with subordinates can also be important to increase levels of trust and commitment.

Besides, the EI is strongly associated to almost three traits of organizational engagement that is consisted by emotional engagement, operational engagement and established engagement. The emotional engagement promotes the encouraging emotions of intimacy and adherence to the organization. The operational engagement is also associated with the engagement level one has acquired for the company especially in the case one is occupied by fugitive trends (Shafiq *et al.*, 2016). Established engagement has to do with the perception of liability to keep on working for the same organization (Meyer *et al.*, 1991).

Generally, emotional engagement together with positive way of thinking can lead to a decent working life (Di Fabio *et al.*, 2016).

In summary, throughout the years Emotional Intelligence is considered to be critical and a lot of researchers have tried to prove it as a particular field depending on people's characteristics. As a result, emotional intelligence plays an important role in everyday professional life (Cherniss, 2003). Additionally, it has been reported that emotional intelligence can guide to effective leadership competences in the pharmaceutical companies.

#### *The research design*

In order to attain the study's objectives, as well as to achieve Communication Model fulfilment, it had been determined to formulate a specific questionnaire to be distributed to specialized pharmaceutical professionals after having been adapted accordingly based on Greek Pharmaceutical market reality; in order to guide us to relevant conclusions about EQ's importance for the Greek pharmaceutical companies. Another aspect of the answers for that set of questions addressed to senior or middle level managers might lead to the assessment of EQ's value in the context of communication with other members of the teamwork & also subordinates.

As a result, the required questionnaire had been designed around the basis of the long form of Trait Emotional Intelligence Questionnaire (TEIQue) version 1.50, created by Petrides (2009)-Department of Psychology/University College of London - that includes 153 items, 15 facets, four factors, and global trait of emotional intelligence and focuses on Greek Pharmaceutical Companies Professionals' Emotional Intelligence (TEIQue-GPCP).

In fact, this Greek short version (TEIQue-GPCP) adapted from the one hundred and fifty three multi-rater surveys (TEIQue, v.1.50) was fulfilled and comprised of fifty focused questions concerning the main characteristics and the essential 6 out of 17 items concerning the demographic data, in total. All fifty questions are primarily referred to as the perception of self-awareness and self-management, whereas social awareness and social management are of great interest, as well. The principal selection of questions that expressed the four above-mentioned characteristics is based on the existing models /definitions of emotional intelligence (Goleman, 1998; Bar-On, 2002), a subjective categorization of the 50 items questionnaire per 4 characteristics.

On the one hand, that specific questionnaire had already been adopted in the Greek reality (TEIQue-GPCP) whereas, on the other hand, it had been uploaded via a certain webpage and had been sent to two-hundred and fifty Middle and Senior Managers of Greek National and Multinational Pharmaceutical Companies.

Based on SFEE (Hellenic Association for Pharmaceutical Companies) empirical data in 2018, total population occupied in the Greek Pharmaceutical industry is around 25,000 people; a percentage of approximately 10% of them (i.e., 2,500 people represent the whole sample of Middle to Senior Managers). My sample of the expected responders was 10% of the previously-mentioned total sample. In practice, one hundred and fifty-six questionnaires had been collected, out of which only one hundred and fifty-five questionnaires included responses that is to say, a percentage of 62% of the expected participants (250) in the survey. Based on the above-mentioned

answers and the scale rating, we will analyze those results, so as to create the expected Communication Model through which Leadership effectiveness & Company's Performance are anticipated to be increased by the development of emotional intelligence characteristics.

#### *The research importance*

First of all, scientific data about the relationship between emotional intelligence and leadership and decision making are missing in the Greek Pharmaceutical Industry; however, the MSCEIT (Mayer *et al.*, 2003) has already been utilized in various studies because it strongly proves that emotional intelligence and leadership effectiveness are connected positively to a large extent (Kerr *et al.*, 2005; Rosete and Ciarrochi, 2005). Rosete and Ciarrochi, (2005) searched to what extent is connected emotional intelligence, personality, mental intelligence and leadership effectiveness in senior managers in Australia using the MSCEIT evaluation and the Wechsler (2012) Abbreviated Scale of Intelligence (WASI) evaluation. As a result, they confirmed that emotional intelligence high levels drive to better business profits achievements which are associated with leadership effectiveness. Kerr *et al.* (2005) searched to what extent managerial emotional intelligence and leadership effectiveness are connected by using the MSCEIT test as defined by employees' assessment. Based on their results, it seems that emotional intelligence can play a crucial role to seniors' leadership effectiveness. Another conclusion has to do with subordinates' better understanding of leadership effectiveness in case emotional intelligence levels are finalized to be higher.

As per our evaluation of previous research data/results, it is concluded the following:

- Based on Greg Megowan's (2012) article from Pepperdine University, Graduate School of Education and Psychology, he managed to run a scientific research regarding the relationship between emotional intelligence & behavior of sales managers working in bio-pharmaceutical industry; in fact, the study results proved that emotional intelligence was strongly associated with leadership effectiveness and organizational achievements. Therefore emotional intelligence high levels had managed to improve managers' behavior within Phyogen, Inc. which is a global large biotechnology company having had for revenues over \$14 billion dollars in 2010 and as a result, to define directly high-level leaders existed and train better leaders for the company's sake in the future.
- Additionally, according to the 20<sup>th</sup> CEO survey conducted in 37 countries in March 2017 by Price Waterhouse Coopers (PWC), it was assumed that 79% of the interviewed CEOs found it difficult to recruit managers with leadership skills whereas 72% of them also face difficulties to employ emotional-intelligent managers, as well.

As a matter of fact, there is no known research data that investigate the correlation among emotional intelligence, leadership effectiveness and decision-making process in the pharmaceutical sector globally. It is expected that this study will help to investigate the existence of strong relationship between EI, leadership effectiveness and decision-making process among middle and senior managerial executives in the Greek pharmaceutical industry.

Therefore this research is guided to four most important characteristics which Emotional Intelligence is compromised by, that is to say self-awareness, self-management, social awareness, social management included in the short version questionnaire regarding Greek Pharmaceutical Companies Professionals' Emotional Intelligence (TEIQue-GPCP) adapted from the 153 multi-rater survey (TEIQue, v.1.50, that created by Petrides, 2009).

#### **Objectives and Methodology**

As a matter of fact, by re-examining international articles, through the recent 30 years (1988-2018), this particular research objectives can be described as follows:

- To investigate if pharmaceutical organizations are firstly familiar with emotional intelligence's valuable impact on business progress and secondly make their employees participate in competences' development procedure by running training projects, in order to increase their managers' emotional intelligence; six strategies proposed by Weisinger (1998) that play an important role for enhancing emotional intelligence.

- To learn about the ways middle and senior managers exchange information and ideas with their personnel in case they are exerted impact by emotional intelligence components & other leadership characteristics as useful tools; so as to be competent to enhance their performance and therefore organization's profitability, by using the most suitable decision making procedure and leadership performance, as proposed by Walumbwa *et al.* (2011).

In order to attain the study's objectives, as well as to achieve Communication Model fulfilment, it had been determined to formulate a specific questionnaire to be distributed to specialized pharmaceutical professionals after having been adapted and filled in by them; in order to guide us to relevant conclusions about EI importance for the Greek pharmaceutical companies. Another aspect of the answers for that set of questions addressed to senior or middle level managers might lead to the assessment of EI value in the context of communication with other members of the teamwork & also subordinates.

All fifty questions are primarily referred to the perception of self-awareness and self-management, whereas social awareness and social management are of great interest, as well. The principal selection of questions that expressed the four above-mentioned characteristics is based on the existing models /definitions of emotional intelligence (Goleman, 1998, 2001; Bradberry and Greaves, 2003; Bar-On, 2002), a subjective categorization of the 50 items questionnaire per 4 characteristics.

In practice, one hundred and fifty-six questionnaires had been collected, out of which only one hundred and fifty-five questionnaires included responses that is to say, a percentage of 62% of the expected participants (250) in the survey. Based on the above-mentioned answers and the scale rating, we will analyze those results, so as to create the expected Communication Model through which Leadership effectiveness & Company's Performance are anticipated to be increased by the development of EQ's characteristics.

### **Data Statistical Analysis**

#### *Aggregated results based on demographic data*

In principal, we have to summarize the aggregated type of the collected answers by making use of the 50 main items and the 6 demographic data. The total number of responders, categorized by sex, is calculated to be 146 (105 male, 41 female).

#### Group 1: Men who are in the age range of 30-40 years old (26 persons)

The majority of them –approximately 80%–have given high scores to the questions of social awareness, that is to say, in the range of 4 to 7 grades. They seem to perceive other persons' feelings very satisfactorily. They have a lot of good qualities such as energetic, decisive persons, oriented to their goals and satisfied by their professional life but they seem to change their minds extremely easily. The majority of them –approximately 75%–have given low scores to the questions of social management, that is to say, in the range of 1 to 3 grades. They are almost unable to influence other people's feelings and decisions. They are also in difficulty of taking control of several demanding situations in their jobs. The majority of them –approximately 80%–have given low scores to the questions of self-management, meaning that, in the range of 1 to 3 grades. They can't take control of their emotions and are unable to change their behaviors/habits. In general, they can't cope with changes at work effectively since they put pleasure before business. In fact, they must be under pressure to really work hard.

#### Group 2: Men who are in the age range of 40-50 years old (47 persons)

The majority of them –approximately 70%–have given high scores to the questions of social awareness, that is to say, in the range of 4 to 7 grades. They seem to perceive other persons' feelings adequately satisfactorily. Almost 50% of them have given high scores to the questions of self-awareness, whereas the rest of them have given low scores to the corresponding questions. The majority of them (70%) seem not to have many good qualities but they are acceptable decision-makers and adequately satisfied by their professional life. Half of them have clear emotions, being cool and energetic negotiators while the other half change their minds easily. In fact, the percentage of men that declared their answers were untrue came up to an impressive high one percentage (87%). The majority of them –approximately 85%–have given high scores to three questions of social management. They

can influence people's emotions and opinions since they can adjust their behavior/ feelings and handle things in a cool and composed manner. Therefore, believe that things will work fine in their lives. On the other hand, 50% of them declare that can deal their colleagues effectively and know how to make them feel better when they need it. Furthermore, half of that group put other people's interests above their own.

Group 3: Men who are in the age range of 50-60 years old (17 persons)

The majority of them –approximately 80%-have given low scores to the questions of social awareness, meaning that, in the range of 1 to 3 grades. They seem not to perceive other persons' feelings very satisfactorily. They are excellent decision makers. Besides they are neither dynamic personalities, nor energetic with goals to be done and good negotiators. Finally, 75% of them declared that their answers were not absolutely true. The majority of them –approximately 90%-have given high scores to the questions of social management, that is, in the range of 4 to 7 grades. They can influence either other people's feelings or their opinions. They can express their disagreement and solve disputes by controlling all situations of his accountability. They are cool and able to make others feel better, as a result people admire them. Besides they aren't concerned about how things will work in the future and put their interests above other persons' ones. The majority of them –approximately 90%-have given low scores to the questions of self-management, that is to say, in the range of 1 to 3 grades. They are unable neither to express / control their feelings nor achieve negative thoughts control. They can't also change their behavior or habits and cope with changes, in general. They can't adjust themselves to various environments. On the contrary, they are able to make their impulsiveness control and stress management assessing pros and cons during decision making process. Their jobs are their first priority.

Group 4: Men who are in the age range of 60+ years old (15 persons)

The majority of them –approximately 85%-have given low scores to the questions of social awareness, meaning that, in the range of 1 to 3 grades. They seem not to perceive other persons' feelings very satisfactorily. The majority of them –approximately 90%-have given high scores to the questions of self-awareness, that is, in the range of 4 to 7 grades. They seem to perceive their own feelings extremely, since their emotions are clear, they are self-satisfied when things are fulfilled well and they have very good qualities such as dynamic personalities and good negotiators. The majority of them –approximately 90%-have given high scores to the questions of social management, that is, in the range of 4 to 7 grades. They can influence either other people's feelings or their opinions. They can express their disagreement and solve disputes by controlling all situations of his accountability. They are cool and put others' interests above theirs, as a result people admire them. They believe that things will work well in the future and can handle people effectively. The majority of them –approximately 90%-have given high scores to the questions of self-management, meaning that, in the range of 4 to 7 grades. They are able either to express / control their feelings or achieve negative thoughts control. They can also change their behavior or habits and are motivated. They can work hard under pressure without making project planning by doing stress management, at the same time. On the contrary, they are unable to make their impulsiveness control. Their jobs are their first priority.

Group 5: Women who are in the age range of 30-40 years old (13 persons)

The majority of them –approximately 80%-have given high scores to the questions of social awareness, that is to say, in the range of 4 to 7 grades. They seem to perceive other persons' feelings very satisfactorily. They have a lot of good qualities such as, decisive and dynamic persons and satisfied by their professional life and good results they offer but they seem to change their minds easily not having clear feelings and cool mood at the percentage of 50%. Besides, 30% of them declared that they are neither good negotiators nor energetic with goals. The majority of them –approximately 70%-have given high scores to the questions of social management, that is, in the range of 4 to 7 grades. They can influence either other people's feelings or their opinions. They can express their disagreement and solve disputes although they can't control all situations of their accountability. They are cool and put others' interests above theirs. They don't believe that things will work well in the future (60%) and are unable to handle people effectively (70%). The majority of them –approximately 75%-have given high scores to the questions of self-management, that is to say, in the range of 4 to 7 grades. They can take control of their emotions and are able to change their behaviors/habits. In general, they can cope with changes at work by doing stress management and they put business before pleasure. In fact, they can really work hard without being under pressure. But it's difficult for them to make impulsiveness' and negative thoughts' control.

Group 6: Women who are in the age range of 40-50 years old (17 persons)

The majority of them –approximately 80%-have given high scores to the questions of social awareness, meaning that, in the range of 4 to 7 grades. They seem to perceive other persons' feelings very satisfactorily. The majority of them –over 80%-have given high scores to the questions of self-awareness, that is to say, in the range of 4 to 7 grades. They seem to perceive their own feelings extremely right, since their emotions are clear, they are self-satisfied when things are fulfilled well and they have very good qualities such as energetic persons with goals and good negotiators. They are fully satisfied by their professional life (100%). Besides, they are neither dynamic personalities nor good decision makers and change their minds easily (50%). Finally, 40% of them declared that their answers were not absolutely true. The majority of them –over 70%-have given high scores to the questions of social management, meaning that, in the range of 4 to 7 grades. They can influence either other people's feelings or their opinions and are able to handle people effectively. They can control all situations of their accountability. They know how to make other people feel better when they need it. But they aren't cool, they can't express their disagreement and solve disputes and put their own interests above others' ones. They don't believe that things will work well in the future (70%). The majority of them –approximately 65%-have given high scores to the questions of self-management, that is to say, in the range of 4 to 7 grades. They can take control of their emotions and are able to change their behaviors/habits and adjust to new environments.

Group 7: Women who are in the age range of 50-60 years old (10 persons)

The majority of them –approximately 60%-have given high scores to the questions of social awareness, that is, in the range of 4 to 7 grades. They seem to perceive other persons' feelings very satisfactorily. The majority of them –approximately 70%-have given high scores to the questions of self-awareness, that is to say, in the range of 4 to 7 grades. They seem to perceive their own feelings extremely right, since their emotions are clear, they are self-satisfied when things are fulfilled well and they have very good qualities such as energetic persons with goals. They are self-confident by making the right decisions. Besides they are neither good negotiators nor satisfied by their professional life (60%). They aren't dynamic personalities and change their minds easily (50%). Finally, 80% of them declared that their answers were not absolutely true. The majority of them –over 70%-have given high scores to the questions of social management, meaning that, in the range of 4 to 7 grades. They can influence either other people's feelings or their opinions and are able to handle people effectively. They are cool and they can control all situations of their accountability. They believe that things will work well in the future. But they can't express their disagreement and solve disputes and put their own interests above others' ones (50%). But they don't know how to make other people feel better when they need it. The majority of them –over 60%-have given low scores to the questions of self-management, meaning that, in the range of 1 to 3 grades. They are unable neither to express / control their feelings nor make their impulsiveness control and stress management. They can't also change their behavior or habits and aren't self-motivated so as to make project planning at all. They can't adjust themselves to various environments. On the contrary, they are able to assess pros and cons during decision making process and achieve negative thoughts control. Their jobs aren't their first priority.

Group 8: Women who are in the age range of 60+ years old (1 person)

That person (100%)-has given low scores to the questions of social awareness, that is, in the range of 1 to 3 grades. She seems not to perceive other persons' feelings very satisfactorily. That person (100%)-has given low scores to the questions of self-awareness. She seems not to perceive her own feelings, since her emotions aren't clear and she isn't self-satisfied when things are fulfilled well. Besides they are neither dynamic/energetic persons with goals nor self-confident about her decisions. But she has very good qualities such as cool personality and good negotiator. Finally, she declared that her answers were not absolutely true. That person (100%)-has given low scores to the questions of social management, that is to say, in the range of 1 to 3 grades. She can influence neither other people's feelings nor their opinions. She can't handle people effectively since she doesn't know how to make others feel better when they need it. But she can express her disagreement and solve disputes by controlling some situations of her accountability. She believes that things will work well in the future. That person (100%)-has given high scores to the questions of self-management, that is to say, in the range of 4 to 7 grades. She is able either to express / control their feelings or achieve negative thoughts and impulsiveness control. She can also change her behavior or habits and cope with changes in general. Her job is her first priority. She can adjust to



various environments, as well. On the contrary, she can't work hard under pressure or make project planning by doing stress management, at the same time.

As a matter of fact, we can depict results for every emotional intelligence element per sex and per age group as follows:

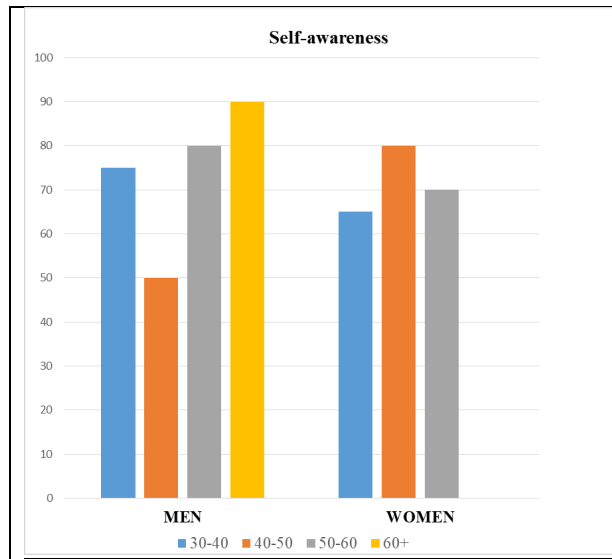


Figure 1:  
Self-awareness graph scores per sex, per age group

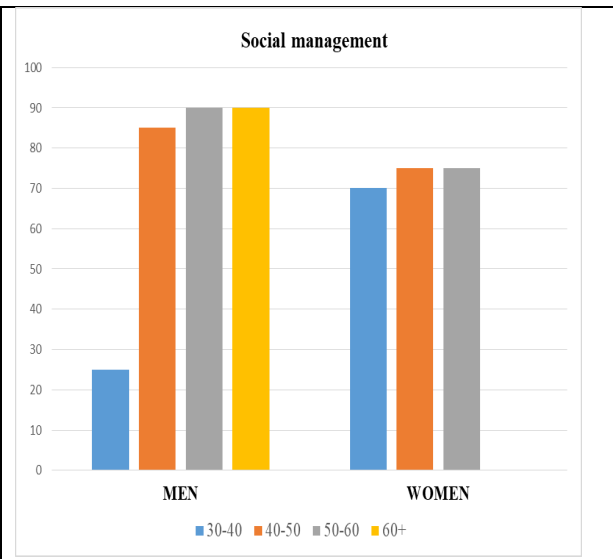


Figure 2:  
Social management graph scores per sex, per age group

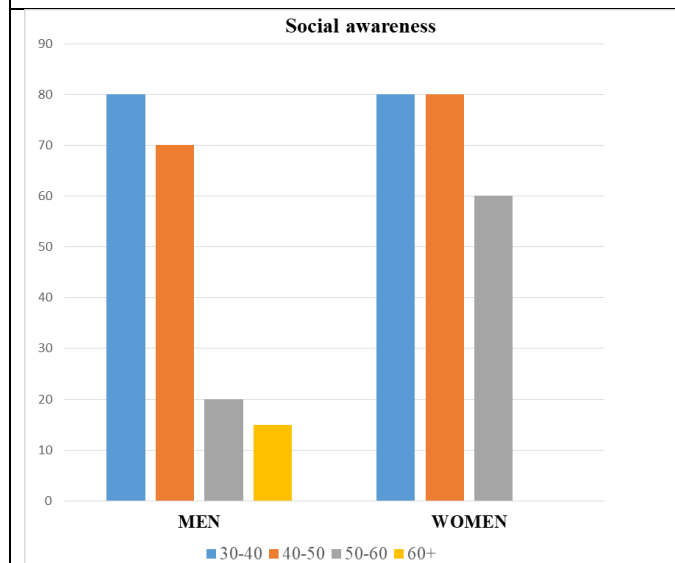


Figure 3:  
Social awareness graph scores per sex, per age group

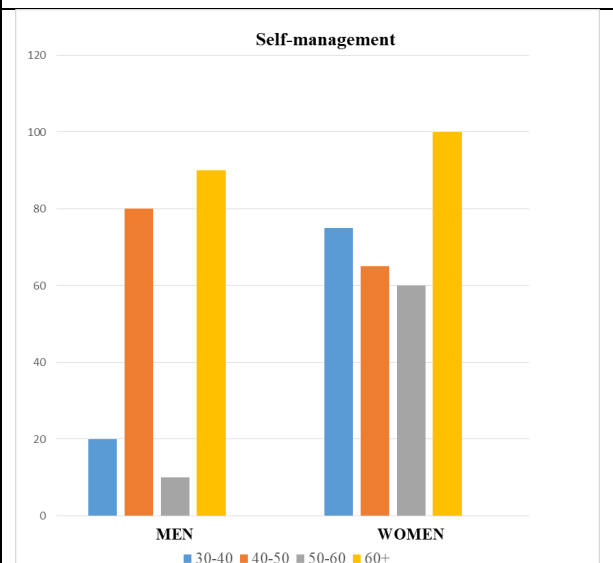


Figure 4:  
Self-management graph scores per sex, per age group

*Factor analysis*

In order to find and explain the common factors of the above analyzed aggregated results, as a total of variables, we applied the factor analysis statistical method. As matter of fact, we can try to make all these factors to be measurable and derive the correlation among the observed variables, as well. The recommended way to do that is by means of factor analysis, an explanatory statistical technique that will help us define the structure and the correlations among the available data. More specifically, we are able to reduce the whole problem's dimensions, by trying to summarize the principal data, total selected factors' number may be smaller than the principal variables; create new variables "factors" that quantify non-measurable quantities like Emotional Intelligence;

explain data correlations for which we suppose that are exclusively due to common factors' existence created by our data. This particular analysis is based on the above mentioned 50 item questionnaire that was replied by 155 participants. Factor analysis' aim is the categorization of all related questions and the finding of all non-measurable quantities that are indicated by each factor (self-awareness, self-management, social awareness and social management). In practice, this analysis' initial aim is to find possible common factors among the total of 50 questions that have been incorporated in the given questionnaire. To be clear, all questions that are related to demographic data have to be excluded from the analysis.

The reliability of internal consistency of the measurements refers to the degree to which the questions that measure the same characteristic appear high consistency or correlation either one another or with this particular characteristic. The evaluation of this reliability is usually managed in the aid of an index or a reliability coefficient, for instance the well-known Cronbach's index  $\alpha$ . When this index values raise up to 0.7 or 0.8 can be considered as satisfactory. The calculation of that reliability index is usually associated with the calculation of the degree of correlation of every question / variable with the total sum of all the questions/variables. For instance, in the case of questions that appear low correlation with the total correlation, we can argue that they have negative influence in the reliability of the measurements and of course we need to make corrections regarding these questions. As a result, 4 groups were created from the questionnaire based on the factor analysis and Cronbach's index  $\alpha$  was calculated for them, as well.

Furthermore, based on the usage of the statistical package SPSS, version 24, we are able to present all the results and the consequent tables derived from the factor analysis. We can also depict the mean term for each variable in a graph as follows (Figure 5):

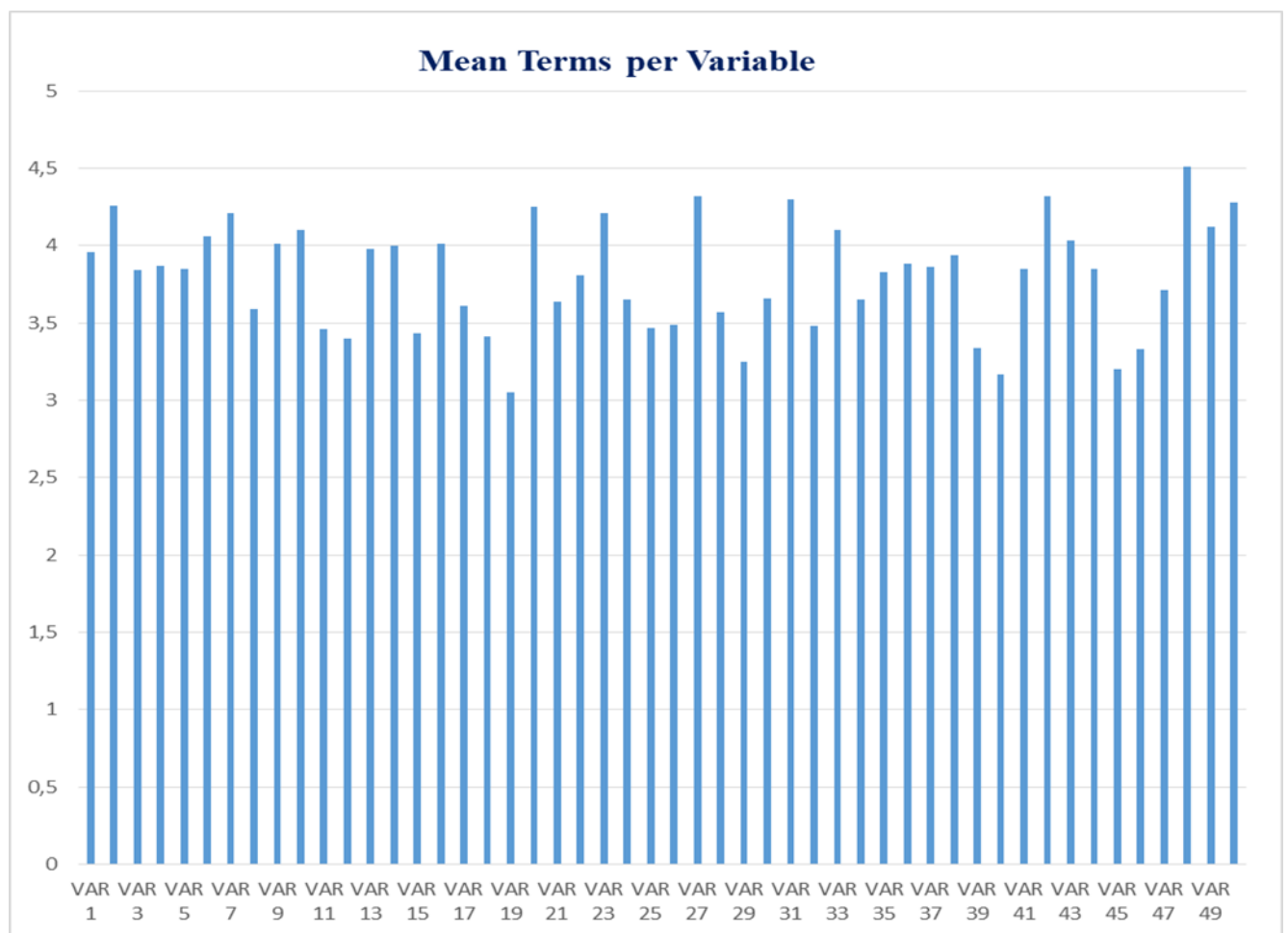


Figure 5: Mean Terms graph per variable

The correspondent conclusions can be depicted in a so-called Maslow's pyramid type shape as follows(Figure 6):

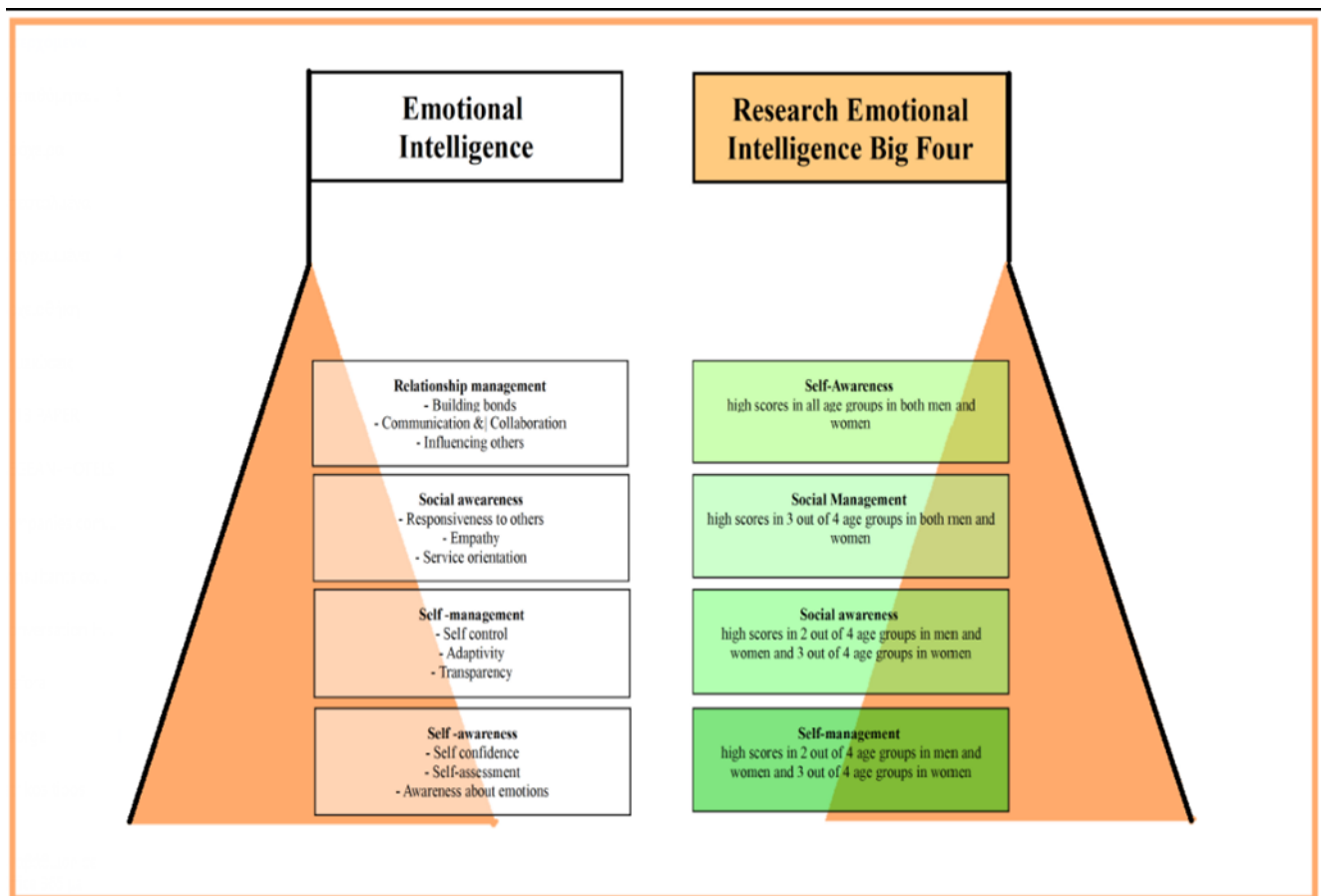


Figure 6: Theoretical communication model on emotional intelligence big four

The EI Model on the right, based on Kasapi's (2019) dissertation, can really be called as an innovation compared to the already existing model of EI as far as the present time concerned.

## Conclusions

Overall and based on the objectives of the research and the needs of a specifically demanding and evolving market, the one of the Greek Pharmaceutical Products, we can sum up that present study's value-according to the results of qualitative analysis - in the following short bullets:

- Regarding Emotional Intelligence traits recognition and administration among middle & senior managers, self-awareness was assumed to be the most important factor for men and women of all ages, as well, as depicted at Figure 6 of Theoretical Communication Model on Emotional Intelligence Big Four.
- With regards to Emotional Intelligence recognition and administration among middle & senior managers, social management was assumed to be next most important factor for men and women of all ages, as well as depicted at Figure 6 of Theoretical Communication Model on Emotional Intelligence Big Four.
- Regarding Emotional Intelligence recognition and administration among middle & senior managers, social awareness was thought to be the third important factor for men and women of all ages, as well as depicted at Figure 6 of Theoretical Communication Model on Emotional Intelligence Big Four.
- With regards to Emotional Intelligence recognition and administration among middle & senior managers, self-management was expected to be the least important factor for men and women of all ages, as well as depicted at Figure 6 of Theoretical Communication Model on Emotional Intelligence Big Four.

Therefore, by examining EI traits one by one via the given questionnaire and based on gender and age respectively, we can assume that emotional intelligence appears to be an important part of employees' professional life in the everyday practice of Greek Pharmaceutical Companies, even unconsciously and without special training.

Additionally another aspect of the whole thing has to do with really low levels of middle and senior managers' self-management and regulation among genders and ages of different educational levels and marital status; this conclusion is absolutely disappointing because it may lead us to the existence of possible conditions of impulsiveness, fear, anger and various other negative emotions ; that is to say, communication abilities and leadership capacities may be decreased to a large extent or even lost. Besides, nervousness may also lead to self-control loss which implies employees' demotivation, decision making process deterioration and as a result, an overall company's profitability decrease. Moreover, we can sum up that present study's value-according to the results of quantitative analysis - in the following short bullets:

- Regarding Emotional Intelligence recognition and administration among middle & senior managers, the initial first factor analysis led to four basic groups, that is to say, self-awareness, social management, social awareness and self-management that did agree with the categorization of the qualitative aggregated results.
- Cronbach's index  $\alpha$  showed that all three groups were reliable apart from the group of social awareness which is characterized by extremely low reliability index  $\alpha$  (0.429).
- With regards to Emotional Intelligence recognition and administration among middle & senior managers, an additional factor analysis was realized and gave four different factors.
- Additionally, updated Cronbach's index  $\alpha$  showed that all different four groups, that is to say, self-awareness, social management, social awareness and self-management were reliable.

Finally, putting together all qualitative and quantitative results, we can assume that emotional intelligence plays an important role among professional relations and cooperation of pharmaceutical executives even though they are not aware of its existence scientifically but only empirically. As far as managers that appear all EI traits high levels is concerned, they may also have high levels of communication abilities and leadership skills. Decision making process seems to be effective in high level EI executives, as well.

To definitely wrap-up the conclusions of the present thesis, the already proposed theoretical model may be a useful tool for the Pharmaceutical executives by being trained, let's say every six months, via EI four traits assessment and retrained again in the aid of other communication techniques as well; in the aim of improving existing questions scores to be able to develop intrapersonal and interpersonal skills with the ultimate objective to increase company's turnover and profitability.

### **Limitations of the Study**

In fact, differences among results are due to the fact that this specific analysis is an investigational one whose results are based on the existing bibliography and the researcher's opinion mostly. As a matter of fact, this research is subjective and follows various criteria, the majority of which are empirical. Finally, that specific analysis' quality depends on the available data derived from the participants' replies.

### **Proposal for Further Analysis**

Due to the existence of poor bibliography regarding Emotional intelligence especially in the Greek Pharmaceutical Market, it is an absolutely great challenge for any interested person to deal with a similar subject of that industry so as to broaden our knowledge through other empirical tools.

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