The Impact of Emotional Intelligence on the Relationship Between

Financial Literacy and Financial Behavior

"The Case of the Lebanese Banking Consumers"

Thesis submitted in accordance with the requirements of Haigazian University for the degree of Master in Business Administration

By

Robert Mesrob Krikor DerMesrobian

May 2019

HAIGAZIAN UNIVERSITY

Thesis Release Form

I, Robert Mesrob Krikor DerMesrobian,

☐ Authorize Haigazian University to supply copies of my thesis to libraries or individuals upon request

☐ Do not authorize Haigazian University to supply copies of my thesis to libraries or individuals upon request

_____

Signature

_____

Date

Acknowledgements

I would like to start with my expression of gratitude to all those who have contributed directly or indirectly towards the accomplishment of my MBA's thesis work.

Special thanks to both of my supervisors, Dr Rami Daou and Dr Najoie Nasr, for constantly advising me throughout my research work and leading me through the right path of research.

Last but not least, I would like to thank my family members and close friends for standing by my side in overcoming any drawbacks I faced throughout my journey. It would have been impossible to achieve this accomplishment without your support.

Abstract

The global financial crisis of 2007 led researchers to study the underlying reasons behind people's loan/credit disrespecting behaviors which caused tremendous setbacks to major economies. After a handful amount of academic research, banks and other financial institutions admitted their unethical behaviors towards their clients. Being knowledgeable about people's lack of knowledge in financial principles, they had provided them with novel and tricky financial services which an ordinary client couldn't comprehend. Since then, many governments such as USA, Canada, Australia and Switzerland started educating their citizens the financial principles which might be of their need to avoid the reoccurrence of a similar global financial crises.

Nonetheless, throughout the several years of research in this field, scholars didn't find a holistic model in which all the variables influencing people's financial behavior are present. That is why this topic remains worth studying about further.

Recently, calls for the need of behavioral finance approach rose in the academic world. Therefore, this study checks the impact of emotional intelligence on the relationship between financial literacy and financial behavior focused on the Lebanese banking consumers. By the literature collected about the three mentioned variables – emotional intelligence, financial literacy, financial behavior – five hypotheses are proposed. Based on these hypotheses, the research model is drawn following Hayes (2013)'s Process Models in which emotional intelligence mediates the relation of financial literacy and financial behavior. Nonetheless, as per the research's literature, one type of a financial behavior, savings & investment behavior, is treated as a dependent variable.

In order to collect the necessary data to test the posed hypotheses, a questionnaire is designed and conducted following the convenient sampling method and using SurveyMonkey online survey platform in December 2018 on Lebanese banking consumers owning either a debit or a credit card. To analyze a total of 187 valid responses, quantitative techniques are used through IBM Spss and its macro, Process Model 1 and Model 74.

The results failed to show a significant relation between the dependent variable, financial behavior, and the two independent variables, financial literacy and emotional intelligence. However, significant results exist in the further exploration of the data by moderated mediation in which emotional intelligence moderates the mediation between financial literacy and a type of financial behavior: savings & investments behavior. Some interesting significant results are also attained using the respondents socio-demographics information such as the lack of any significant relation of people's years of professional experience with the research's three variables.

This research enriches the literature and gives practical insights to policymakers. Being the first of its kind in terms of relating emotional intelligence to financial literacy and financial behavior, it gives itself a unique sense and importance in the field of financial behavioral studies. It also recommends further research on financial behaviors to be focused on savings and investments behaviors. A practical value-added of this research is the recommendation to the concerned policymakers in enhancing both the emotional intelligence and the financial literacy in order to have citizens making good financial decisions.

Keywords: financial behavior, savings and investments behavior, financial literacy, emotional intelligence

Table of Contents

List of Tables

List of Figures

The Impact of Emotional Intelligence on the Relationship Between Financial Literacy and Financial Behavior

"The Case of the Lebanese Banking Consumers"

Chapter 1: Introduction

1.1 Research Problem

The evolution of money and of the financial systems made financial matters to be more and more vital to people's daily lives (Brown, Henchoz, & Spycher, 2017) as they didn't only grow in importance, but also in complexity (Brown, Henchoz, & Spycher, 2017; Ooko, 2017). Due to the inability of people in coping with these changes, their insensible financial decisions i.e. financial behaviors led tp dramatic negative outcomes on personal, national and international levels such as the 2007 global financial crisis (Laeven & Valencia, 2012; Laeven, Levine, & Michalopoulos, 2015). Financial institutions even confessed after the crisis to have taken advantage of people's lack of knowledge in financial matters (Laeven, Levine, & Michalopoulos, 2015). They provided the consumers innovative and novel financial products which are hard to be grasped and specifically engineered to exploit people's misunderstandings (Laeven, Levine, & Michalopoulos, 2015). That is why, mainly after the 2007 international financial crisis, researchers started working thoroughly on shaping the best educational systems to improve people's understanding in financial matters i.e. financial literacy, such as Head (2014), Lusardi and Mitchell (2014) and Brown, Henchoz and Spycher (2017). Even governments started enacting new policies in protecting the consumers and investors rights (Daou, 2017 (b)). However, regardless of the many prominent publications on this matter, no unified and holistic method was concluded (Ooko, 2017). The reason behind it is that researchers still couldn't confirm what exactly influences financial literacy and financial behavior of people, or the nature of the relations of already found influencing factors. Similarly, there are a lot of discrepancies between different national and

international financial education systems effectiveness. For instance, in conducting a cross regional study of financial literacy rates in Switzerland, Brown, Henchoz and Spycher (2017) recommended financial education policymakers to shape the educational programs according to the needs and likings of the given culture. On the other hand, Lusardi and Mitchell (2014) suggested a future research to take into account intelligence as a variable influencing the financial knowledge and application of people. Henceforth, due to this lack of research in academia, this research will be shaped to find the impact of emotional intelligence on the relation between financial literacy and financial behaviors of people, and in specific the Lebanese banking consumers.

1.2 Importance & Purpose of the Research

According to Huston (2010), financial literacy is an important factor to be researched to the extent that many governments such as the United States of America, Canada and Switzerland are taking it into account in their financial and educational policies. Research showed in many parts of the world such as Europe and the US, that the more financially literate a person is, the better will he/she manage his/her financials (Lusardi, 2008; Huston, 2010; Nicolini, Cude, & Chatterjee, 2013; Fernandes, Lynch, & Netemeyer, 2014; Lusardi & Mitchell, 2014; Ooko, 2017).

Regardless of the efforts done by many, the worldwide financial illiteracy rate is quite high (67% according to Standard and Poor's Global Financial Literacy Survey conducted in 2014) giving this phenomenon a global identity (Ooko, 2017). Similarly, Lebanon faces a low financial literacy rate yet a bit better than other nations on the same stance (Lebanon's financial literacy rate is 44%, the highest in the Arab World's member states with an average of 30.7%) (Daou, 2017 (b)).Nonetheless, according to a report by the World Bank, the country has made a significant improvement in making people know more about the banking sectors' offers especially after the conference of 2010 about this matter in which the Lebanese minister of finance at that time argued about the misunderstanding of the majority

of the Lebanese about the bank offers. In addition, the minister asked for a clearer explanation of the bank offers to be presented to the public (Daou, 2017 (b)).

Notably, the Lebanese public and private sectors are responsible of this relative advancement in financial literacy among the Lebanese. Concerning the public sector, it is important to note here the Central Bank of Lebanon (Banque du Liban-BDL)'s 2010 international conference about financial education with the cooperation of the OECD and its formation of unit at the Banking Control Commission of Lebanon regulating and reporting about financial consumer protection (Daou, 2017 (b)). In the Lebanese public sector, it is also important to note the Basil Fuleihan Institute of Finance, a governmental organization founded in 1996 with the cooperation of France, which researches about the majority of financial issues in Lebanon and aims on increasing the financial literacy of the citizens (Daou, 2017 (b)). As for the private sector, some NGOs like the Financial Literacy Institute and Injaz might be good examples in the objective of increasing the financial literacy of people. It is also worth mentioning here the short videos prepared by Byblos Bank and aired on LBCI after the evening news for 2 minutes called "Think Financially – Fakker Maliyan" as part of its corporate social responsibility. Through these videos, the bank's administration aims on educating the Lebanese what they need to know about banks and financial products work (Byblos Bank, 2018).

Therefore, I believe that a further research on this subject is vital to be done with the inclusion of a new variable, emotional intelligence, as it can be of assistance to these institutions to perform better and provide clearer insights on the affecting factors on financial welfares of the Lebanese public.

By this research work, I aim to study the impact of emotional intelligence on the relationship between financial literacy and financial behavior, focusing on the Lebanese banking consumers.

This research will be able to offer theoretical and empirical enrichment to academia. For the theoretical part, I will be retesting the commonly argued factors influencing on financial literacy and retesting its

influencing power on the financial behavior of people. I will also be adding a new psychological factor through taking into consideration the emotional intelligence a person possesses to the remaining variables. Whereas on the applicable field, this research will give an insight to educational, governmental and non-governmental policymakers on the importance of financial literacy with the public.

1.3 Research Question

What is the impact of emotional intelligence on the relationship between financial literacy and financial behavior?

Chapter 2: Literature Review

2.1 Financial Behavior

2.1.1 Definition

Financial behavior is the way a person behaves in making a very simple financial decision such as paying the electricity bill to the most complex financial decision such as managing a multimillion worth diversified portfolio (Atkinson & Messy, 2012; Head, 2014; Kumar, Watung, Eunike, & Liunata, 2017). Nonetheless, some researchers, such as Atkinson and Messy (2012) take into consideration the person's attitude towards the possession of money as a separate factor in researching this topic. The reason why many scholars are interested in studying people's financial behavior is the fact that this behavior influences remarkably one's financial well-being (McAuley, 2009; Atkinson & Messy, 2012; Kumar, Watung, Eunike, & Liunata, 2017). For instance, the way a person allocates income between consumption and saving is one of the most important financial decisions one can make (Lusardi, 2008; Atkinson & Messy, 2012; Lusardi & Mitchell, 2014). As per the research done by Lusardi (2008), the decision of money allocation is related to the utility people perceive in spending money at present. Yet, the idea of utility is nothing but a reliance on heuristics which might not be truthful (McAuley, 2009). McAuley (2009) explains that not only are the financial decisions made as such, but many of our daily life decisions are through rules of thumbs or based upon previous experiences.

2.1.2 Biases

McAuley (2009) presents an explanation of the biases people commit while making financial decisions. First, people tend to anchor. In other terms, people tend to focus on a single thing and forget about the remaining aspects. McAuley gives the example of a salesman offering in the beginning a 7000$ worth barbecue to make the one of worth 1700$ seem to be a bargain. Yet, after the purchase, the customer realizes that even the 1700$ worth barbecue is overpriced. The second bias people commit in making financial decisions is handling risk. Ironically, research showed that

the ones who can't truly bear the risk of losing the minimum possible amount of money they possess, dive in the deepest in taking risks while making financial decisions e.g. while gambling. This phenomenon is explained by psychologists through the prospect theory (Kahneman & Tversky, 1979; McAuley, 2009). As basis to this theory, researchers reason the idea of diminishing returns or the diminishing marginal utility principle, which is about an additional unit giving less satisfaction than the first, the main arbitrator in financial risk bearing behavior (Kahneman & Tversky, 1979; McAuley, 2009). In their initial research, Kahneman and Tversky (1979) claim that the loss of a 100$ from the 200$ possessed money affects more than the loss of the same amount from a possessed 1200$. Similarly, McAuley (2009) explains clearly that supposing a person is upset because of the loss of 1000$ in a gamble, won't be twice as upset as when a loss of 2000$ is incurred. Nor will the gain of 1000$ give the same effect than losing 1000$ in absolute values. Henceforth, researchers concluded that the risk bearing willingness of people is due to the more painful feeling of a loss than the enjoyment of an equivalent gain. Framing according to McAuley (2009) is the third financial bias. Different ways are available to present this occurrence, for example, the reason why parents prefer gifting many different small gifts to the children than a single large gift is one is the sum of happiness caused through the small gifts being higher than the large one. Or, for example, the reason why people don't mind buying a lottery ticket worth of 1$ with a return of 1,000,000$ and having a winning chance of much less than a 1% is because the 1$ doesn't cause any deficiencies in their personal budgets (McAuley, 2009; Lerner, Li, Valdesolo, & Kassam, 2015).

Other biases added by McAuley (2009) are such as the endowment, short –term and mental accounts biases. The endowment bias is the hardship in letting go of a useless ownership such as the reluctance of throwing away an old computer that costed much to purchase. The short-term bias represents the financial decisions we make just for the present while disregard the future. This theory in fact is as old as the foundation of classical economics in the 18th century with quoting

one of David Hume's sayings: "There is no quality in human nature, which causes more fatal errors in our conduct, than that which leads us to prefer whatever is present to the distant and remote" (McAuley, 2009). Lastly, the mental account bias, or also called "sunk costs perspective" by Lerner, Li, Valdesolo and Kassam (2015), exists when we unwillingly distinguish the same fact differently. Suppose you lost a concert ticket, it's very probable for you not to attend the concert. Whereas if you lost the cash money to buy the concert ticket, you will most probably use other sources such as your credit card to buy the ticket and attend the concert.

All these biases are committed by many of us daily with sometimes causing much negative consequences at the end. In order, not to commit these biases, a sort of financial awareness must be obtained by consumers. This required awareness is called financial literacy in academia and will be presented in the next part.

2.2 Financial Literacy

2.2.1 Definition

According to a recent research by Daou (2017 (a)), no universal definition of financial literacy is reached till date in the research world. Daou (2017 (a)) argues that this lack of a universal definition to financial literacy is not a problem, rather it's an opportunity for a rich definition to emerge in the future. Even so, defining financial literacy is necessary in this research paper, it being a vital variable in it. It's worth mentioning here that due to the lack of a universal definition of financial literacy, scholars study it from different perspectives with financial ability and knowledge being axioms to build upon. A good differentiation of definitions of financial literacy through time is presented by Daou (2017 (a)) which shows a consistency of the core principle: financial decisions based on one's financial knowledge. Noctor, Stoney and Stradling (1992), being the oldest in his list, claim

financial literacy to be the ability to make informed judgments and to take effective decisions regarding the use and management of money. Smakin, Low and Taylor (2012) being the most recent, claim financial literacy to be a practical financial knowledge. Between these two definitions, other explanations of financial literacy emerged through time in academia. For instance, in 2007, a US based non-profit organization called "JumpStart Coalition" explained financial literacy as the ability to use knowledge and skills in managing financial matters (Daou, 2017 (a)). Three years later, Task Force on Financial Literacy , a governmental institution from Massachusetts formed to study the access of financial education to all, defined it not only by the knowledge and skills, but also they added the confidence to make responsible financial decisions (Daou, 2017 (a)). This explanation is quite similar to the one proposed by Huston (2010) who explains financial literacy by the knowledge, application and confidence in financial matters. A representation of Huston's theory is displayed in the Figure 1:

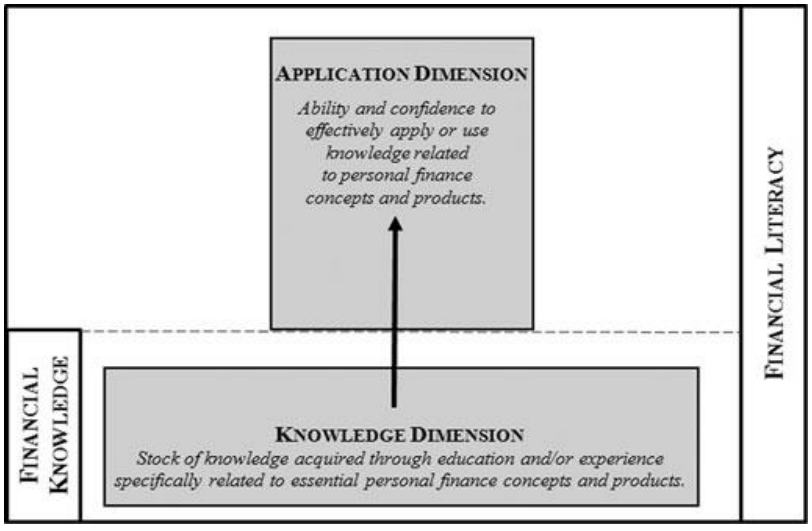


Figure 1: Huston (2010) Financial Literacy Model

In her model, Huston (2010) gives financial literacy two dimensions: knowledge and application. One's financial knowledge is acquired through education and life experiences. This knowledge is then used in making sound financial judgements.

This research paper will regard financial to be a person's knowledge and familiarity of basic financial principles (Atkinson & Messy, 2012; Asaad, 2013; Fernandes, Lynch, & Netemeyer, 2014; Head, 2014).

2.2.2 Levels

The three most commonly used levels of financial literacy are inflation (showing the knowledge of the inflation effect), risk diversification (showing the sensibility in financial investments) and compound interest (showing the acquaintance of the gains incurred through interests) (e.g. (Lusardi, 2008; Atkinson & Messy, 2012; Lusardi & Mitchell, 2014)). Some researchers add to these other more advanced levels of financial knowledge. For instance, Atkinson and Messy (2012) add five additional levels of financial literacy: division (showing the mathematical ability of a person), calculation of interest plus principle (showing the holistic gain/loss of a financial investment), risk and return (showing the financial risk taking sensibility of a person), the time value of money (examining the purchasing power of individuals) and the interest paid on loan (showing the sensibility of financial returns of individuals). These levels are explained accordingly to the factors that influence on one's financial literacy. Due to this addition and subtraction of financial literacy levels, Lusardi (2008) differentiates between simple and advanced financial literacy. The simple literacy includes the three main levels as they formulate the basic numeracy and financial principle knowledge of a person (Lusardi, 2008). Whereas

the advanced literacy includes any additional level researchers see fit to be added with the basic three (Lusardi, 2008).

2.2.3 Influencing Factors

Education

While talking about the influencing factors of financial literacy, general education can't be ignored (Atkinson & Messy, 2012; Ooko, 2017). Very strong relation between years of education as well as level of education were found with financial literacy in many studies such as Atkinson and Messy (2012), Lusardi and Mitchell (2014) and Ooko (2017). For instance, research showed that university graduates have a higher financial literacy rate than people who have high school as their highest level of education (Ooko, 2017). In addition, the field a person focuses his/her education in affects the level of financial literacy (Ooko, 2017). As an example, talking about university students, the ones who have majored in economics or business or at least the ones who have taken a course in these fields showed higher propensity of knowing financial principles than students of other faculties (Ooko, 2017). Even before university, Asaad (2013) reports that even economic principles students learn at high school level show significant correlation with financial literacy. Scholars find general education playing a major role in increasing the numeracy ability of people, something which is highly required to possess a good financial literacy (Lusardi & Mitchell, 2014). Not only this, but also the quality and the level of education of parents, mainly the mothers' as it's mostly found to have highly significant influence on the financial literacy of children (Atkinson & Messy, 2012; Ooko, 2017). Suppose two families, family A with the father having majored in humanities and family B with parents both having majored in business studies, the kids of family B are believed to be more financially literate than the kids of family A. Also, suppose both parents of families' A and B had studied the same courses at university, the kids of the couple having the higher degrees are believed to possess higher degrees of financial literacy than the other family's

kids. It is worth to mention here that truly education does affect financial literacy which provoked advanced economy governments such as the US, Norway and Switzerland to have recently started implementing thoroughly financial educational notions and courses in their school curriculums to enhance this skill in their populations (Atkinson & Messy, 2012).

Gender

Gender is another factor influencing financial knowledge of a person (Atkinson & Messy, 2012; Lusardi, 2008). Majority of research found that males are more knowledgeable in financial matters than females (Atkinson & Messy, 2012; Lusardi & Mitchell, 2014; Ooko, 2017; Asaad, 2013). The reason behind it might be first, the patriarchal ideology dominance in the majority of our societies, putting a heavier responsibility on males in taking care of the family's financials and second, the fact that males for the same reason start working earlier than females (Ooko, 2017). Unfortunately, the cause of this phenomenon is so far not very well researched which led Lusardi and Mitchell (2014) to claim that it's worth being studied further and recommended researchers not to talk about it much before reliable scholastic research is done. On the other hand, Assaad (2013) and Ooko (2017) present a couple of research papers in which gender had no significant influence on financial literacy which makes this relation even worthier to be discussed and to be checked for validation due to its controversial effect.

Age

Age also influences the financial literacy of people (Atkinson & Messy, 2012; Lusardi, 2008; Ooko, 2017; Asaad, 2013; Henager & Cude, 2016). As a conclusion from the rich literature, an inverted U-shape curve or also called hump-shaped curve (e.g. Lusardi and Mitchell, 2014) is the best way to explain its affecting force on financial literacy (Asaad, 2013). As Atkinson and Messy (2012), Lusardi and Mitchell (2014) and Ooko (2017)

explain, the best literate people are the middle-aged people. Young people have not yet received any education about dealing with finances and their experience is reasonably mediocre whereas the elderly having a remarkable amount of experience lack the coping of the changes happening in the financial fields (Atkinson & Messy, 2012; Lusardi & Mitchell, 2014; Asaad, 2013). Moreover, recent research proves the possession of the elderly more financial knowledge than their youngsters, however, they also lack the necessary analytical function to behave wisely in financial matters. (Lusardi & Mitchell, 2014; Henager & Cude, 2016). Therefore, by combining some of the experience they formed throughout their lives and the knowledge they received from their education, the middle-aged individuals are the most financially literate amongst the population (Atkinson & Messy, 2012; Lusardi & Mitchell, 2014; Asaad, 2013; Henager & Cude, 2016).

Intelligence

Lusardi and Mitchell (2014) also argue about the possibility of cognitive abilities having an influence on the financial literacy of people. The researchers base their claim on the fact of it being influenced by culture and shaping people's minds. This principle will be discussed in the coming parts.

2.3 Intelligence

2.3.1 Definition

There is no doubt that some people realize patterns quicker than others, understand new concepts before others or simply form stronger relations with people than others. Even so, some excel in expressing verbally whereas others excel doing so emotionally. Dickens (2008) explains these acts by two words: cognitive abilities. According to the researcher, a cognitive ability is the usage of interpersonal and intrapersonal intelligences to formulate an appropriate response to a given phenomenon (Dickens, 2008). However, the definition of intelligence has attracted numerous scholars who dedicated their lives in explaining it, yet no consensus definition was derived from all that rich literature, showing how complex of a matter it is (Dahl & Cilliers, 2012). Nonetheless, it's important to mention that there are several explanations accepted widely in academia when discussing intelligence, mentioned by different scholars from each one's angle based on each one's area of expertise (Dahl & Cilliers, 2012). For instance, Dahl and Cilliers (2012) argue that from psychometric perspective, intelligence is explained by the outcomes of tests of mental abilities. Whereas from neurobiological perspective, intelligence is how people use their intellectual and mental resources with their interactions with the environment (Dahl & Cilliers, 2012). The one thing scholars agree on is that intelligence, no matter what form and angle one looks at it, is a cognitive ability necessary for life. In explaining what cognitive abilities are, Dahl and Cilliers (2012) explain that they are the abilities to learn, acquire, store and implement a given knowledge. Moreover, the latter scholars claim, cognitive abilities involve problem-solving skills through deductive and inductive reasoning. It is possible to explain cognitive ability as one's ability to adapt to the

environment argue Dahl and Cilliers (2012), as adaptation includes a vast amount of resourcefulness and noticeability of small details.

2.3.2 Intelligence Quotient

According to Checa and Fernandez-Berrocal (2015), the intelligence quotient (IQ) has a well-established relation with cognitive abilities. As a general explanation of IQ, it is the ability to comprehend and analyze phenomenon through one's intellectual capacities (Gondal & Husain, 2013; Checa & Fernandez-Berrocal, 2015; Keyes, Platt, Kaufman, & McLaughlin, 2016). Researchers divide IQ to two factors: fluid and crystalized intelligence (Checa & Fernandez-Berrocal, 2015; Keyes, Platt, Kaufman, & McLaughlin, 2016). The fluid intelligence is the ability to conduct logical analysis of new phenomena without relying on the acquired knowledge (Checa & Fernandez-Berrocal, 2015; Keyes, Platt, Kaufman, & McLaughlin, 2016). Whereas, the crystalized intelligence is the use of acquired knowledge from education and experience to solve a certain matter (Checa & Fernandez-Berrocal, 2015; Keyes, Platt, Kaufman, & McLaughlin, 2016).

Nonetheless, the intelligence quotient is highly criticized by contemporary scholars. This is mainly due to the fact that IQ represents only one's mathematical and logical abilities (Batool, 2013; Gondal & Husain, 2013) i.e. intellectual abilities, while disregarding other types of intelligences i.e. social skills (Gondal & Husain, 2013). Daniel Goleman recalls in his 1995's bestselling book "Emotional Intelligence: Why It Can Matter More Than IQ" that many of his classmates having scored high in IQ achieved remarkably less than people who scored lower rates (Goleman, 1996). He explains that scoring high grades at school is

not enough by itself to predict a promising professional career in the future (Goleman, 1996). This is due to the interactions one is faced to in the business world (Goleman, 1996; Gondal & Husain, 2013). Gondal and Husain (2013) explain that as humans are emotional creatures by nature, their emotions play a major role in their analyzing abilities. Therefore, this research paper studies the effect of an individual's ability to control his/her emotions in learning and making good financial decisions.

2.3.3 Emotional Intelligence

2.3.3.1 Definition

Coined by Salovey at the end of the last millennium (in 1990), the emotional intelligence (EI) goes beyond the traditional way of surveying and quantifying the intelligence of a person (Engelberg & Sjoberg, 2006; Brackett, Rivers, & Salovey, 2011; Fernandez-Berrocal & Checa, 2016). With Daniel Goleman's chef-d'oeuvre, EI attracted the attention of all and made it quite an interesting subject to be researched due to the claims of EI being more powerful than IQ (Shipley, Jackson, & Segrest, 2010; Brackett, Rivers, & Salovey, 2011; Bryant & Malone, 2015). Simply said, the coiners explained EI as the cognitive abilities to identify, process and manage emotions (Engelberg & Sjoberg, 2006; Brackett, Rivers, & Salovey, 2011; Bryant & Malone, 2015). Nevertheless, after years of research, EI is explained now through two methods: ability model and mixed model (Brackett, Rivers, & Salovey, 2011; Dahl & Cilliers, 2012; Checa & Fernandez-Berrocal, 2015; Fernandez-Berrocal & Checa, 2016). The ability model is when we discuss about one's mental abilities in processing emotional information to enhance the cognitive reaction towards something (Brackett, Rivers, & Salovey, 2011; Dahl & Cilliers, 2012; Checa &

Fernandez-Berrocal, 2015; Fernandez-Berrocal & Checa, 2016). Whereas the mixed model is the combination of mental and emotional abilities with personality traits to form a certain reaction (Brackett, Rivers, & Salovey, 2011; Dahl & Cilliers, 2012; Checa & Fernandez-Berrocal, 2015; Fernandez-Berrocal & Checa, 2016).

2.3.3.2 Competencies

Though the definition of EI is somewhat unified, researchers differ in their outlooks of it. For instance, the Mayer and Salovey Model (1997) of EI takes into consideration four components: perception of emotion, use of emotion to facilitate thought, understanding of emotion and management of emotion (Brackett, Rivers, & Salovey, 2011). The perception of emotion, which is the basis of any emotional action, is the identification of various emotions in oneself and others (Brackett, Rivers, & Salovey, 2011). Of course, managing one's emotions comes prior to managing other people's emotions (Brackett, Rivers, & Salovey, 2011). Yet, it is well argued that an emotionally intelligent person doesn't only master his/her own emotions in making decision yet he/she masters the emotions of the counterparties to overcome any troublesome actions from the other side (Brackett, Rivers, & Salovey, 2011; Checa & Fernandez-Berrocal, 2015). Therefore, it's valid to say that the EI of a person is at its best when one is able to control his/her emotions as well as the emotions of others. The use of emotion to facilitate thinking is the shaping of one's emotions to be of assistance of using mental abilities such as reasoning, problem solving and communicating with others (Brackett, Rivers, & Salovey, 2011). This is done through allocating enough attention to a phenomenon and at its best stance, memories are used to even formulate a mixture of mental and emotional judgements on occurrences (Brackett, Rivers, & Salovey, 2011). Understanding and analyzing emotions as the third emotional

intelligence branch is the incorporation of emotional language in one's emotional antecedents (Brackett, Rivers, & Salovey, 2011). In other terms, it focuses much on labeling linguistic expressions of emotions and the ability of interpreting and knowing these expressions. The reflective regulation of emotions is the fourth and last component of the EI according to the Mayer and Salovey model of EI and is regarded as the caliber of an emotional reaction (Brackett, Rivers, & Salovey, 2011). It's by this component that the power of an emotional reaction is set accordingly (Brackett, Rivers, & Salovey, 2011). Another approach in measuring EI is the Wong and Law Model which also presents four dimensions (Bryant & Malone, 2015). First, the self-emotional appraisal which is about the abilities of comprehending and expressing one's feelings (Bryant & Malone, 2015). Second, the other's emotional appraisal which is about the abilities of comprehending and expressing other's feeling (Bryant & Malone, 2015). Third, the regulation of emotions which is about the regulating and recovering of psychological distresses caused by emotions. Lastly, the use of emotions, which is about the abilities of people using their emotions constructively in different activities and performances. A third method of presenting the emotional intelligence is the one adopted by Goleman. The first time he presented his view of EI was in his 1995's publication in which he presented five competencies of EI (Goleman, 1995; Batool, 2013). First, self-awareness, representing the consciousness of one's emotions influences on the individual and his/her entourage. Second, self-regulation, representing the ability of one in remaining in control of one's emotions no matter what the circumstances. Third, motivation, representing the will a person possesses in achieving a set of goals by abiding to high standards and quality in reaching them. Fourth, empathy, representing the internalization and personalization of

certain occurrences rendering one's emotional attachment stronger with other people. Fifth, social skills, representing the communication skills a person possesses in socializing as well as in conflict resolutions and management of change. In this research, Goleman's EI's components will be considered in studying EI because for many academicians, Goleman is the most effective leader in this field and his model is the most widely accepted in academia (Batool, 2013).

2.3.3.3 Importance

No matter what approach one would like to adopt in explaining EI, it is obvious that it influences human behavior (Shipley, Jackson, & Segrest, 2010; Fernandez-Berrocal & Checa, 2016). As a start, researchers found out that EI influences significantly the success at the workplace (Shipley, Jackson, & Segrest, 2010; Brackett, Rivers, & Salovey, 2011; Bryant & Malone, 2015). For example, referring to previous researches, the successfulness of US presidents is significantly correlated with their EI levels (Shipley, Jackson, & Segrest, 2010). As a proof, researchers differentiated between Carter, a low EI president, and Roosevelt, a high EI president (Shipley, Jackson, & Segrest, 2010). It was found that Roosevelt was a more emotionally intelligent and a more successful president than Carter (Shipley, Jackson, & Segrest, 2010). Similarly, in a study made on business partners, individuals having higher rates of EI than normal made 1.2Million USD more than others (Shipley, Jackson, & Segrest, 2010). Some researchers also were successful in finding statistically significant correlations between EI and academic performance (Shipley, Jackson, & Segrest, 2010). Two reasons exist for such a relation; claim Shipley, Jackson and Segrest (2010). First, academics cause stress to the person (e.g. taking an exam) who

has to cope with it (Shipley, Jackson, & Segrest, 2010). Also, as it changes quite much (e.g. teaching styles, subjects, assignments…), one is forced to perform at his/her best no matter what the environment (Shipley, Jackson, & Segrest, 2010). Second, mainly academic work is a personal activity one does which requires high self-management skills (Shipley, Jackson, & Segrest, 2010). EI also helps enhancing the problem solving and educational intake skills (Dahl & Cilliers, 2012; Checa & Fernandez-Berrocal, 2015; Brackett, Rivers, & Salovey, 2011). For instance, a person with a higher EI would solve more cognitive tasks than a person with a lower EI according to a test conducted by Schutte et al. in 2001 (as cited in (Checa & Fernandez-Berrocal, 2015)). Also, verbal and non-verbal intelligence is remarkably higher with people having higher EI (Checa & Fernandez-Berrocal, 2015; Brackett, Rivers, & Salovey, 2011). This type of intelligence also makes the person capable of controlling emotional actions such as aggression and irresponsible behaviors (e.g. alcoholism and drug abuse) (Checa & Fernandez-Berrocal, 2015).

Chapter 3:Theoretical Framework

3.1 Hypotheses

In her article, "Against Financial Literacy Education" published in 2008, Professor Lauren Willis critiques the research and empirical works done on the relation between financial literacy and financial behavior. She presents more than a single argument in advancing her claim for financial literacy alone not being a good indicator for a good financial behavior (Willis, 2008).Therefore the necessity of checking other variables complementing financial literacy's effect on people's financial behaviors, something this research aims to do. Nonetheless, more recent research works than the one of Prof. Willis, show statistically significant and positive relation between financial literacy and financial behavior (Lusardi, 2008; McAuley, 2009; Atkinson & Messy, 2012; Asaad, 2013; Fernandes, Lynch, & Netemeyer, 2014; Ooko, 2017). The conclusion researchers got is that financial behavior is the outcome of one's financial literacy (McAuley, 2009; Atkinson & Messy, 2012; Asaad, 2013; Fernandes, Lynch, & Netemeyer, 2014). In addition, not many research works with a concentration on the Lebanese bank consumers are conducted checking the significance of the relation in discussion. A good example would be Daou (2017 (a)) who found a positive significant result for financial literacy effecting financial behavior. In this research, I am interested in exploring if financial literacy has an effect on the financial behavior of the Lebanese banking consumers. Therefore,

H1: The higher the financial literacy of a Lebanese banking consumer, the higher the financial behavior scale score

One's educational success depends on the emotional intelligence level this person has (Goleman, 1995; Fernandez-Berrocal & Checa, 2016). Goleman (1995) claims that in order for the message transmitted through education to be clear to the student, regardless to the instructor's teaching abilities and strategies, the main factor influencing it is his/her emotional intelligence. Moreover, Brackett, Rivers and Salovey (2011) claim that emotional intelligence helps people on being more academically in shape. The reason behind the influence of emotional intelligence on people's educational attainment is due to its ability of shaping a good thinking mind which is trained to make sound decisions (Goleman, 1995). Being an emotionally intelligent person claims Goleman (1995), grants the ability to people to understand the importance the knowledge transmitted through the process of education.

Regardless to her negative approach towards the available methods for financial education, Willis (2008) mentions the possibility and the necessity of financial literacy in being enhanced through educational ways such as teaching and self-study. She claims that through financial literacy education, people are meant to become responsible and sensible financial actors in a way to manage their financials e.g. savings, investments, cash and credits through checking the available news and information in the market. Therefore, as financial literacy is taught at high school, university and professional levels plus learned through experiences, my second hypothesis is

H2: The higher the emotional intelligence quotient of a Lebanese banking consumer, the higher the financial literacy rate

Asaad (2013) argues that behavioral economists showed that humans make choices in nature by the reliance on their intelligence and previous experiences. Similarly, they base their financial decisions on their intelligence and previous experiences which may cause them to fall in financial decision biases mentioned in previous parts. Many times, people don't get the chance to oversee and thoroughly think about their next step, so they tend to use rules of thumbs as their shortcut pathways (Asaad, 2013).

Emotions have direct effects on people's usage of their intelligence (Asaad, 2013). Emotions also play an important role in shaping people's rational and irrational decision making processes (Asaad, 2013; Lerner, Li, Valdesolo, & Kassam, 2015). The cause, to this differentiation is already found by cognitive psychologists: attention (Asaad, 2013). Quoting Chabris and Simons (2010) as mentioned in Asaad (2013): "For the human brain, attention is essentially a zero-sum game. If we pay more attention to one place, object, or event, we necessarily pay less attention to others". Some researchers with similar ideologies claim that humans concentrate on things according to their prejudices from previous experiences they went through as a mechanized direct response processor will be stored in people's minds making it reasonably quick to provide answers (Asaad, 2013). In a simpler language, people will concentrate and tend to understand a phenomenon until confidence is well-established (Asaad, 2013). Psychologists researched extensively on similar behaviors people do and concluded that people's minds through such experiences are trying to detect a pattern to live with (Asaad, 2013). Also, people behave differently towards money. For example, people having salient emotions saturate money more than other people (Engelberg & Sjoberg, 2006). This claim was already proven by Goleman in 1995 by stating that many of his high school

friends having high emotional intelligence succeeded in their careers and raised fortunes regardless to the fact that they weren't academically brilliant. Moreover, the endowment bias and the prospect theory previously explained are purely financial behaviors related to people's emotional states (Salovey, 2006). People who fall in such traps are usually emotionally unintelligent (Salovey, 2006). Therefore, it's worth posing the third hypothesis

H3: The higher the emotional intelligence quotient of a Lebanese banking consumer, the higher the financial behavior scale score

The relation between financial literacy and financial behavior has been researched in academia with taking into consideration a direct relation between them where higher rates of financial literacy directly lead to better financial behaviors (e.g. Mitchell & Lusardi, 2008). Nonetheless, recent studies show that financial literacy alone doesn't explain how people react towards financial matters. Calls for checking the role of people's cognitive abilities and emotions with financial literacy and financial behaviors rose in prominence (Skagerlund, Lind, Stromback, Tinghog, & Vastfjall, 2018). A research work done on this matter showed cognitive abilities to be a key factor that predicts financial literacy (Skagerlund, Lind, Stromback, Tinghog, & Vastfjall, 2018). Similarly, emotional attachment mainly towards mathematics showed statistically significant results as an influencing factor on financial literacy. In addition, Goleman (1995) claims that numeracy assists student's ability in understanding a given information, therefore the ability to use the acquired information in one's everyday life. Having an emotional extremity and being a valid determinant of intelligence, emotional intelligence

will be tested for a mediation role on the relation between financial literacy and financial behavior.

H4a: Emotional intelligence mediates the relationship between financial literacy and financial behavior

Nonetheless, Lusardi and Mitchell (2014) claim that the simplest way to follow people's financial behaviors is to check their savings and investments behaviors. They explain that the public is more tolerant first of all in getting professional feedbacks on their savings and investments behaviors than their daily financial operations such as cash management. Second, they explain that the public is also more into understanding and knowing the good options available for savings and investments than any other financial behavior. That is why, while checking the worldwide financial literacy levels, they have concentrated their financial literacy levels on three influencing factors on people's savings and investments (inflation, interest and risk). Moreover, according to the literature review, emotional intelligence is a must for a better long-term investment planning (McAuley, 2009). By refreshing the idea of long- and short-term financial decision bias, people care more about short term daily life financial decisions than the long-term savings and investments decisions. McAuley (2009) explains that this is true because of people's lack in personal financial confidence and self-regulation. Therefore, the fifth hypothesis of this research is:

H4b: Emotional intelligence mediates the relationship between financial literacy and savings & investments behavior

3.2 Research Model

Based on the posed hypotheses in the previous section, the model below is designed in a way to reflect the proposed relationships between financial literacy, financial behavior and emotional intelligence.

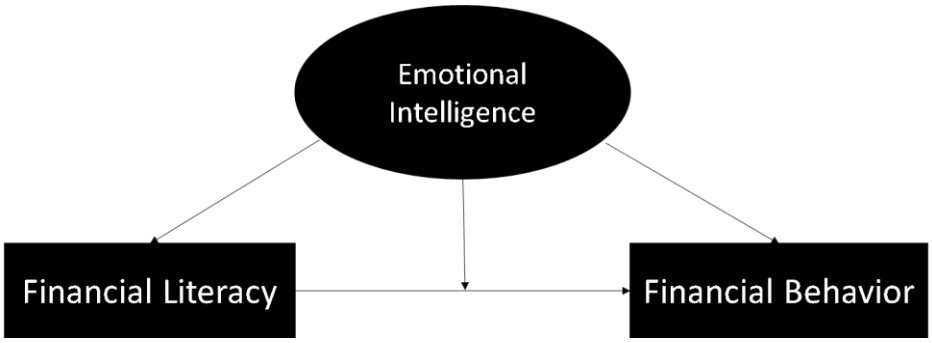


Figure 2: Research Model 1

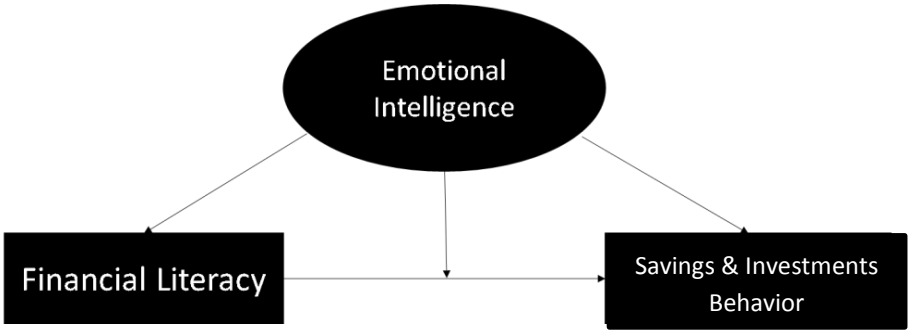


Figure 3: Research Model 2

One of the main objectives of this research is to check the relationship between financial behavior, the dependent variable, with the independent variables, financial literacy and emotional intelligence. Another objective is to build knowledge about the variables and their relations with each other. Nonetheless, a relation between two variables can be subject to a moderation or a mediation effect. A moderation happens when a third variable modifies the relationship strength between two variables (Hayes, 2013). Whereas a mediation explains the effect of an external variable on the dependent variable (Hayes, 2013).

Chapter 4: Research Methodology

4.1 Research Design

This research checks the role of emotional intelligence between financial literacy and financial behavior. In order to test the hypotheses, a survey was conducted. Therefore, this research is a quantitative descriptive research.

4.2 Sampling Technique

Sample Selection

Whether a child or an adult, people are consumers who purchase goods and services to satisfy their needs (Dew & Xiao, 2011). However, according to Dew and Xiao (2011), testing the soundness of people's financial behaviors requires much more complex financial engagements than the act of purchasing food or clothes. According to Dew and Xiao, there are four categories of financial behaviors: cash management, credit management, savings & investments and insurance. Therefore, in order for a person to be able to engage in all of the four financial behaviors mentioned above, one must be a bank client. This research is conducted in Lebanon for banking consumers having engaged in financial transactions using their credit/debit cards or checkbooks. The engagement in the banking services of individuals was proved by including a filter question after the introduction of the survey by which a respondent can respond to yes/no about his/her banking service engagement. Using the convenient sampling method for time and financial research constraints, I sent the URL of the survey (https://www.surveymonkey.com/r/QVM2YS7) using "SurveyMonkey" through WhatsApp and emails. I also posted the link to the survey on my personal social media networks such as Facebook, LinkedIn and Instagram and asked my piloted sample not to

respond in order to avoid falling in a sampling bias. I did ask them to share the link though to get the highest number of possible respondents. Before proceeding any further, a brief introduction of the Lebanese banking sector and some facts about the Lebanese bank customers will be given.

- **Lebanese Banking Sector**

  With Lebanon being granted independence in 1943 and the founding of its sovereign central bank, Banque du Liban (BDL), in 1964, the Lebanese banking sector started prospering (Banque du Liban, 2018 a).. What boosted the growth of the banking sector in Lebanon more was the banking secrecy law of 1956. With time, new laws and regulations, as well as new bodies such as the Association of Banks in Lebanon, the Banking Control Commission in Lebanon, the Special Investigation Committee and the Capital Market Authority rendered the Lebanese banking sector to become solid and ever-prospering. The growth of the banking sector in Lebanon led other forms of financial institutions to rise, for instance, exchanges and comptoirs (specialized lending entities), which provide similar products than the ones of the banks (Banque du Liban, 2018 a). As of January 2018, the commercial banks consolidated total balance sheet shows around 223 Billion USD of assets (Banque du Liban, 2018 b) and the financial institutions consolidated total balance sheet shows around 1.6 Billion USD of assets (Banque du Liban, 2018 c). Both of them combined form around 4.33 times the Lebanese gross domestic product (GDP) (WorldBank , 2018 a; Banque du Liban, 2018 b) compared to 0.12 times at the United States of America (WorldBank, 2018 b; Federal Reserve, 2018). Currently, 65 local and international banks operate in Lebanon (Banque du Liban, 2018 d; Association of Banks in Lebanon, 2018 a) along with 12

representative offices of foreign banks (Banque du Liban, 2018 e). By the end of 2016, the Lebanese banking sector population was 25,260 (Association of Banks in Lebanon, 2018 b). Currently, BANKDATA classifies the Lebanese banks into four categories. Alpha banks having more than 2 Billion USD in customer deposits, Beta banks having customer deposits between 2 Billion USD and 500 Million USD, Gamma banks having customer deposits between 500 Million USD and 200 Million USD and Delta banks having less than 200 Million USD in customer deposits (Anotonios & Mikhael, 2017; BANKDATA, 2018) with the majority of the banking service provision load as well as the assets load being in Alpha banks (BANKDATA, 2018).

- **Lebanese Banking Consumers**

Available data on hand shows a huge shift towards using bank services by the Lebanese banking consumers. According to the data of the Central Bank of Lebanon (BDL), nearly 700,000 bank payment cards were outstanding in Lebanon in June 2003 whereas in June 2018 that number more than tripled to nearly 2,700,000 cards (Banque du Liban, 2018 f). Similarly, regarding the points of sales, in June 2003, nearly 7,350 machines were installed all over Lebanon compared to nearly 35250 machines in June 2018 (Banque du Liban, 2018 f). Furthermore, the usage of checks increased immensely from nearly 2,3 Billion USD in January 1998 to nearly 6 Billion USD in January 2018 combined in LBP and foreign currencies (Banque du Liban, 2018 g; Banque du Liban, 2018 h). Similar scenarios exist on all the services provided by banks in Lebanon such as deposits, saving accounts and loans.

4.2.1 Sampling Size

While choosing the sample size, budget, time, space and energy should be taken into consideration (Hill, 1998). Hence, I will be using Roscoe's simple rule of thumb in choosing my sample size. This can be done as this research has few variables and will be conducted electronically (Hill, 1998). As a rule of thumb, any research should have at least 30 respondents. Added to that, additional respondents by several times (preferably 10) for each variable should be added. As I have 3 variables, I would need 60 respondents to conduct my research. Nonetheless, Hill (1998) claim that the bigger the sample, the more reliable will the research results be. Therefore, I will be targeting around 180 respondents, threefolds of the required number of respondents.

4.3 Instruments

In order for me to collect the necessary data to test my hypotheses, a survey divided into four parts is prepared using the online survey platform "SurveyMonkey". The first three parts assess my variables – financial behavior, financial literacy, emotional intelligence – whereas the fourth one assesses the demographics and socio-economic statuses of my respondents.

As mentioned in the literature, financial behavior is the way a person reacts in making a financial decision. Similarly, investment and retirement planning are regarded as the most important financial behaviors. It's worth mentioning here that for both investment and retirement planning savings are essential. That is why many research papers on financial behavior include questions on savings. For instance, Fernandes, Lynch and Netemeyer (2014) use "saving for an emergency fund", Atkinson and Messy (2012) use a question on active

saving, van Rooij, Lusardi and Alessie (2011) use a question on saving appetite by using a 7 point Likert scale question by which the observant should choose his/her propensity in either saving or consuming additional funds. Some researchers preferred adding a separate question for investment and retirement planning alone. For instance, van Rooij, Lusardi and Alessie (2011) and Dew and Xiao (2011) checked the extent of thought for retirement as well as the existence of an emergency savings fund. Nonetheless, investment, retirement planning and savings are not the only financial behaviors. According to the Financial Management Behavior Scale (FMBS) by Dew and Xiao (2011) four indicators of a holistic financial behavior exists measuring: cash flow management, credit management, savings & investment skills and insurance. The subscales are combined into a set of 15 questions and result a Cronbach alpha of 0.81 (Dew & Xiao, 2011). The research done by Dew and Xiao is the outcome of 7 prominent research works on financial behavior scales. They also validated it by taking into consideration the counsel of academics and professionals involved in this matter. The target population of this scale is the adult banking consumer and the idea behind it is the exploration of the importance of people's financial literacy on their financial behaviors. It is composed of 15 questions out of which 2 are reversed. Hence, I will be using the FMBS in this research as a scale of financial behavior.

The academic work done by Lusardi and Mitchell in 2006 formed a fixed financial literacy measure composed of the following three questions (Lusardi, Mitchell, & Curto, 2010; van Rooij, Lusardie, & Alessie, 2011; Lusardi & Mitchell, 2014; Nguyen, Rozsa, Belas, & Belasova, 2017):

1. Suppose you had $100 in a savings account and the interest rate was 2% per year. After 5 years, how much do you think you would have in the account if you left the money to grow with no fees charged.
2. Imagine that the interest rate on your savings account was 1% per year and the inflation was 2% per year. After one year would you be able to buy:
3. Buying a single company stock usually provides a safer return than a stock market mutual fund.

As explained in the literature, they show people's familiarity and knowledge of three financial principles: interest compounding or financial numeracy, inflation and risk diversification (Lusardi, Mitchell, & Curto, 2010; Lusardi & Mitchell, 2011; van Rooij, Lusardie, & Alessie, 2011; Lusardi & Mitchell, 2014; Nguyen, Rozsa, Belas, & Belasova, 2017). Lusardi and Mitchell explain that these questions were formed by keeping in mind four principles: simplicity, relevance, brevity and capacity to differentiate (Lusardi & Mitchell, 2014). Simplicity so that people can easily understand it, relevance so that questions be designed as per the daily needs of people, brevity so that the questions are used by many and the capacity to differentiate so that comparisons of people's financial literacy can be done (Lusardi & Mitchell, 2014). Their usage in national and international research by governmental and non-governmental organizations such as the US Health and Retirement Study (Lusardi, Mitchell, & Curto, 2010; Lusardi & Mitchell, 2011; van Rooij, Lusardie, & Alessie, 2011; Lusardi & Mitchell, 2014; Nguyen, Rozsa, Belas, & Belasova, 2017), Dutch Central Bank Household Survey (Lusardi & Mitchell, 2011), Lusardi and Mitchell (2011) ,Daou (2017) and many others gave this scale a global credibility in testing people's levels of financial literacy. The 15 questions are presented in Appendix B.

As for the emotional intelligence part, there's no doubt that numerous scales exist having strong validation in academia (Conte, 2005; Perez, Petrides, & Furnham, 2005; Mikolajczak, Brasseur, & Fantini-Hauwel, 2014). For instance, the Multifactor Emotional Intelligence Scale (MEIS) and its updated version the Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT) are ability based tests (Conte, 2005; Perez, Petrides, & Furnham, 2005; Emerling, 2017). Nonetheless, these two models are designed in a way to respond to Salovey and Mayer's four dimensional emotional intelligence model due to which they consist of numerous questions (402 for MEIS and 141 for MSCEIT) (Conte, 2005; Emerling, 2017). These two models are also based on traditional intelligence testing methods (Emerling, 2017) which makes them lose accuracy in presenting the true EI measure (Conte, 2005). Another measurement tool is the Bar-On Emotional Quotient Inventory denoted by EQ-I which provides quite a good reliability and validity (Conte, 2005; Perez, Petrides, & Furnham, 2005; Emerling, 2017) yet it's based on vague theories and doesn't focus on the five big personality dimensions (Conte, 2005). It's also quite long as it takes a person around half an hour to get done with it (Conte, 2005; Emerling, 2017). Schutte Emotional Intelligence Scale (SEIS) is another widely used measurement of EI (Perez, Petrides, & Furnham, 2005) which is based on Salovey and Mayer's initial explanation of EI (Perez, Petrides, & Furnham, 2005; Emerling, 2017). Though it's short as it consists of just 33 items and is recommended to be used for a general outlook of one's EI, it lacks the coverage of the five EI dimensions. Henceforth, in this research, I will be using the short form of the Profile of Emotional Competence (S-PEC), an EI measurement drawn by Mikolojczak, Brasseur and Fantini-Hauwel not a long time ago (in 2014), due to it being the output of extensive research for around a decade, assessment of the five

emotional intelligence competences, validation in several studies and its use of twenty questions only (Mikolajczak, Brasseur, & Fantini-Hauwel, 2014; Emerling, 2017). As per Emerling (2017), the test should take around 5 minutes to be completed. Another reason which encouraged me to use this scale is not to prolong the questionnaire and get a better completion rate. It is composed out of 20 questions out of which 8 are reversed. The twenty questions are presented in the survey on Appendix A, though some examples of the questions are:

"I do not always understand why I respond in the way I do"

"I find it difficult to handle my emotions"

"When I am touched by something, I immediately know what I feel"

Like many of the mentioned research works on financial literacy and financial behavior (e.g. (McAuley, 2009; Lusardi, Mitchell, & Curto, 2010; Lusardi & Mitchell, 2014; Brown, Henchoz, & Spycher, 2017; Nguyen, Rozsa, Belas, & Belasova, 2017), I will be checking demographics and socioeconomic statuses of the sample including age, gender, educational field, educational level, personal monthly income and years of experience.

Pilot study

In order for the pilot study to be even more efficient, I have conducted two consecutive pilot studies each for a week with a gap of one month between the start date of each (first pilot study started on 01/10/2018). In order to have a quick and reliable process in conducting the pilot study, I targeted twenty family members, close relatives and friends

as voluntary convenience sampling for the first pilot study. The most important comments and changes done were:

- Changed the word "maxed out the limit" to "reached the maximum limit" on question 7
- Changed the design of the financial behavior and emotional intelligence questions from matrix to multiple choice questions due to the ease of filling it in that way on mobiles
- Removed the insurance questions from the financial behavior scale due to the negative comments I received. Eight respondents commented that they do not personally own any cars or real estate's therefore the question does not apply on them. Four respondents commented that they do not have any medical insurance but do have social security. It was absurd for them to know what to answer. Also, the majority responded "never" on possessing adequate life insurance. That is why the three insurance questions were removed. The remaining 12 questions are presented in the survey in Appendix A.
- Reshaped the demographic and socio-economic questions (turned the ages to brackets and the field of study to business/non-business, removed the area of living rural/urban question)

For the second pilot study, I targeted 8 of Haigazian University's current business students who emailed me their comments. As per their comments and the analysis of the received data, the following changes were made

- Changed the sequence of the four parts of my questionnaire to start with my dependent variable, financial behavior, followed by my two independent variables, financial

literacy and emotional intelligence, before ending it with the demographic and socio-economic questions

- Changed the sequence of the questions of the emotional intelligence part in a way to have the interpersonal and intrapersonal questions grouped as much as possible
- Some respondents claimed to have finished the survey half the assumed time for taking the survey (estimated to be 8-10 minutes) which resolved the time problem of the first pilot and empowered the possibility of getting a higher completion rate

4.4 Statistical Techniques

In order to test my hypotheses by analyzing the data, simple and multiple regressions were conducted along with Model 4 of PROCESS by A. Hayes using IBM SPSS 22. Prior to that, in order to be able to conduct all that, the data was prepared to be clear and simple. Once the survey ended, I exported the data to IBM SPSS 22. The reversed questions of financial behavior (questions 7 and 8) and emotional intelligence (questions 17, 20, 25, 27, 30, 32, 33, 36) were recoded to reflect the correct score on financial behavior and emotional intelligence. Then, the financial literacy score was calculated by allocation 1 to the correct answer and 0 to the wrong answers. The maximum score is 3 having three questions related to financial literacy. As for the age, I only had one respondent belonging to the group 60 and more. Therefore, I included this respondent to the group "50-59" and recalled it "50 or more". Similarly, having only 6 respondents in the group "450$ or lower" in the personal monthly income part, I merged it with "451-800" group and called it "800$ or lower" to form 10.7% of the total population.

Process Model 4, simple mediation, is presented in Appendix F, and is the model I used to test my hypothesizes. Simple mediation occurs when an independent variable X has a direct effect on an dependent variable Y as well as an indirect effect on Y through the mediator M.

Chapter 5: Findings & Results

The survey started on 07/12/2018 and ended on 21/12/2018. In total, 325 people opened the link out of which 90 did not satisfy the filter question (Do you have a debit or a credit card issued by a Lebanese bank?). From the 235 respondents left, 187 filled the survey to end. Therefore, the survey completion rate is 79.57%.

5.1 Descriptive

Gender

The respondents base to my survey was formed of 80 males (42.8%) and 107 females (57.2%) making it not a very biased distribution between the two genders (50.3% men and 49.7% women from the total population of Lebanon in 2009) (Central Administration of Statistics, 2013). The results are presented in the pie chart of Figure 3 and in Appendix C.

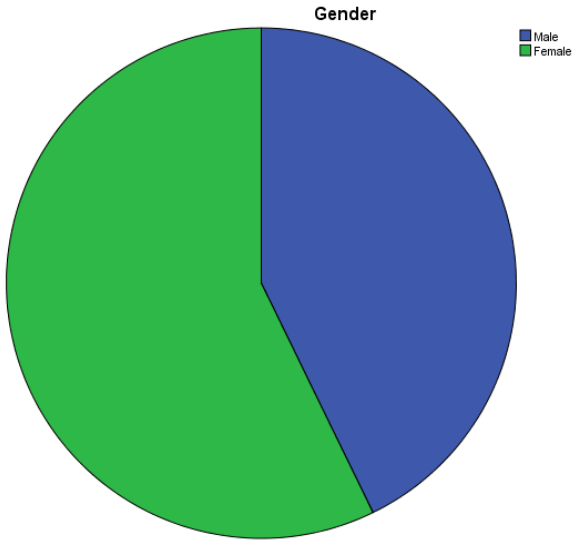


Figure 4: Distribution of Respondents by Gender Pie Chart

Age

My sample is divided into five age groups represented in Figure 4 and in Appendix C. The biggest portion of the respondents belonged to the group "25-29" forming 46% of the total

sample, followed by “30-39” with 28.9% of the total sample. Respondents belonging to the age group “18-24” form 9.1% of the total sample while the age groups “40-49” and “50 or above” formed 8% each.

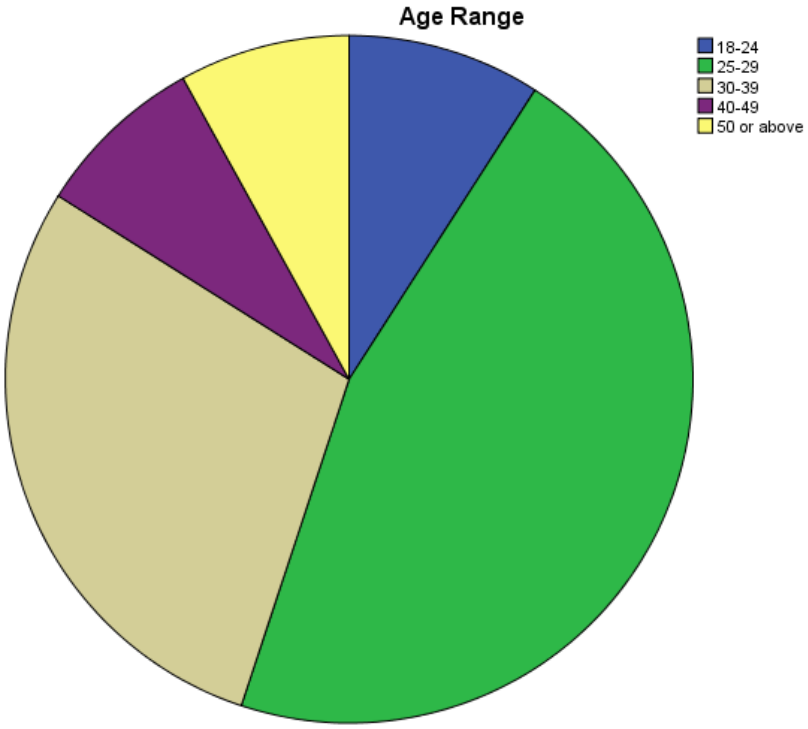


Figure 5: Distribution of Respondents by Age Pie Chart

Educational Level

The majority of the respondents are “Univeristy Graduates” with 50.8% of the total respondents, followed by “University Postgraduartes” with 30.5%, “University Undergraduate “with 12.8% and “Secondary or lower” with 5.9%. Thus, around 80% of the respondents have at least a university degree showing a sample of educated respondents. The results are presented in Figure 5 and in Appendix C.

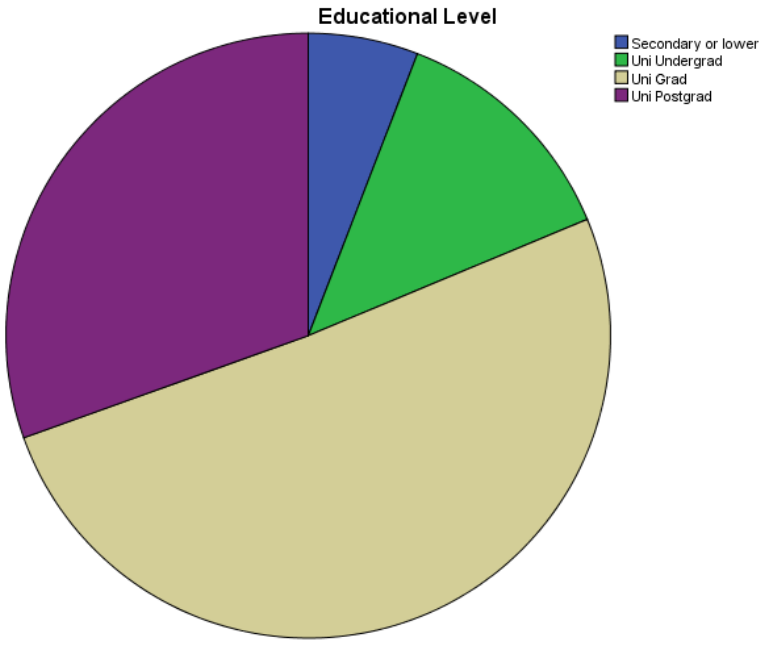


Figure 6: Distribution of Respondents by Educational Level Pie Chart

Education Field

The distribution of the respondents according to their educational field is nearly equal with 53.5% coming from business related backgrounds and the remainder, 46.5%, from non-business related educational fields. The results are presented in Figure 6 and in Appendix C.

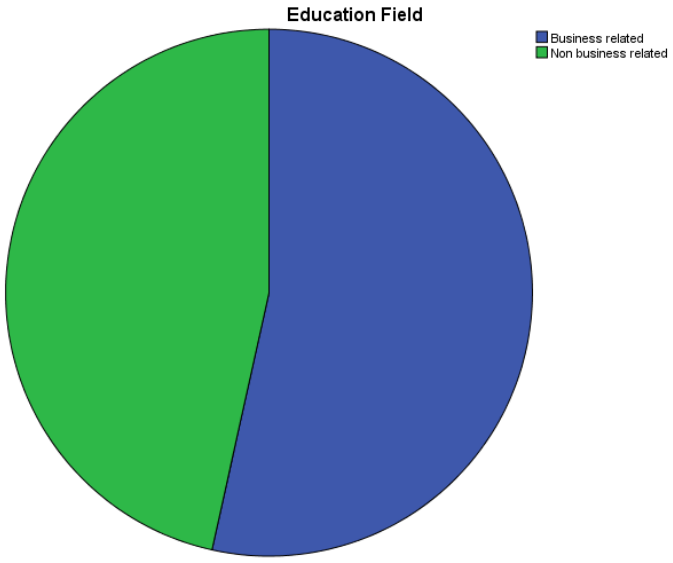


Figure 7:Distribution of Respondents by Education Field Pie Chart

Years of Experience

The portions of my respondents in descending order according to their years of experience belong to the groups "5 to 10 years", "2 to 5 years", "more than 10 years" and "less than 2 years" by 35.3%, 32.1%, 24.6% and 8% respectively. The portion of my sample with at least five years of experience forming around 68% of the total sample shows a sample with a good experience in work. The results are presented in Figure 7 and in Appendix C

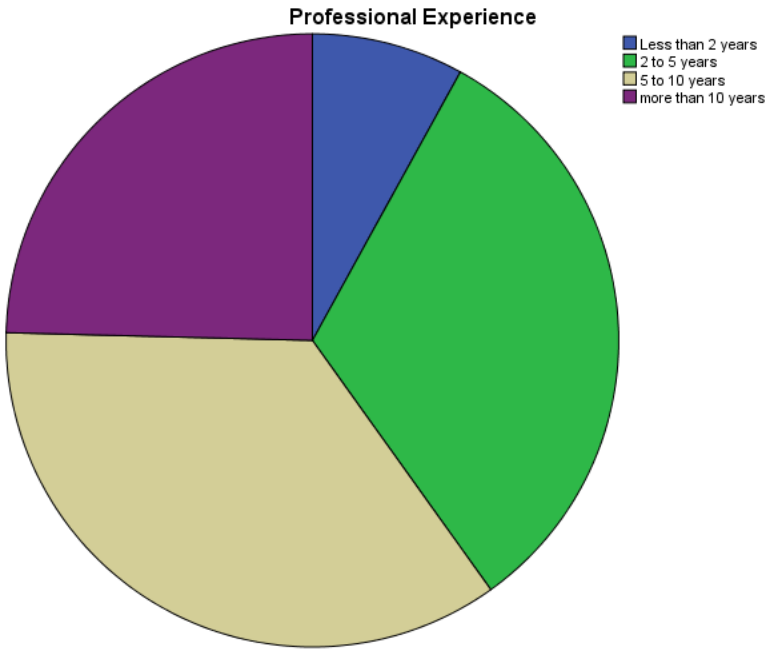


Figure 8: Distribution of Respondents by Years of Experience Pie Chart

Personal Monthly Income

From the 187 respondents, 10.7% earn 800$ or less per month, 25.1% earn between 801$ to 1200$ per month, 31% earn between 1201$ to 1800$ per month, and 33.2% earn 1801$ and more per month. Therefore, around 65% of my sample earn 1201$ and more per month making it to be regarded as a financially middle-class sample (World Bank, 2018). The results are presented in Figure 8 and in Appendix C.

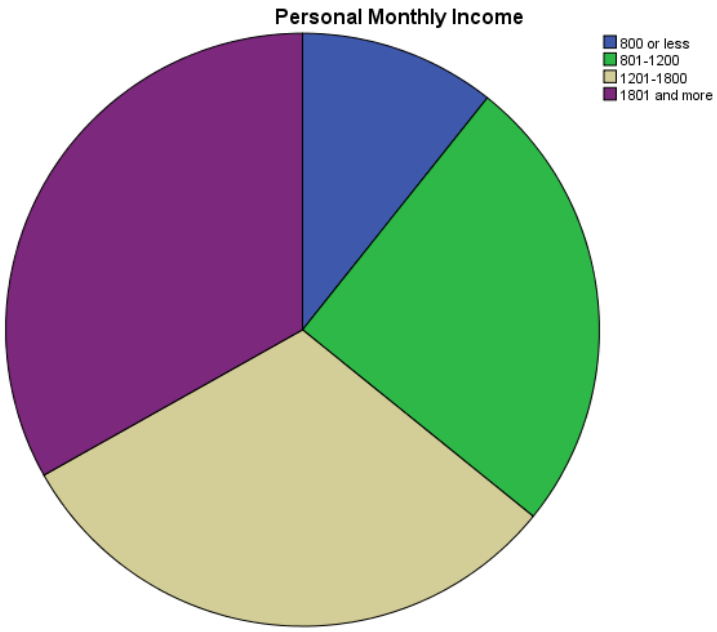


Figure 9: Distribution of Respondents by Personal Monthly Income Pie Chart

Financial Behavior

From the 187 valid respondents who filled my survey questionnaire, the lowest score on the financial behavior scale is 1.70/5 whereas the highest is 4.75/5, almost the maximum possible of 5. Following Xiao and Dew (2011)'s explanation of the financial behavior management scale, only 12.8% of my total sample show a weak financial behavior (scores ranging from 0 to 2.5). 56.2% have moderate wisdom in their financial behaviors (scores ranging from 2.51 to 3.50) and 31% have good financial behaviors (scores ranging from 3.51 to 5). Hence, the mean to the financial behavior scale's score is equal to 3.2124/5 and a standard deviation s= 0.61 (As presented in Figure 10).

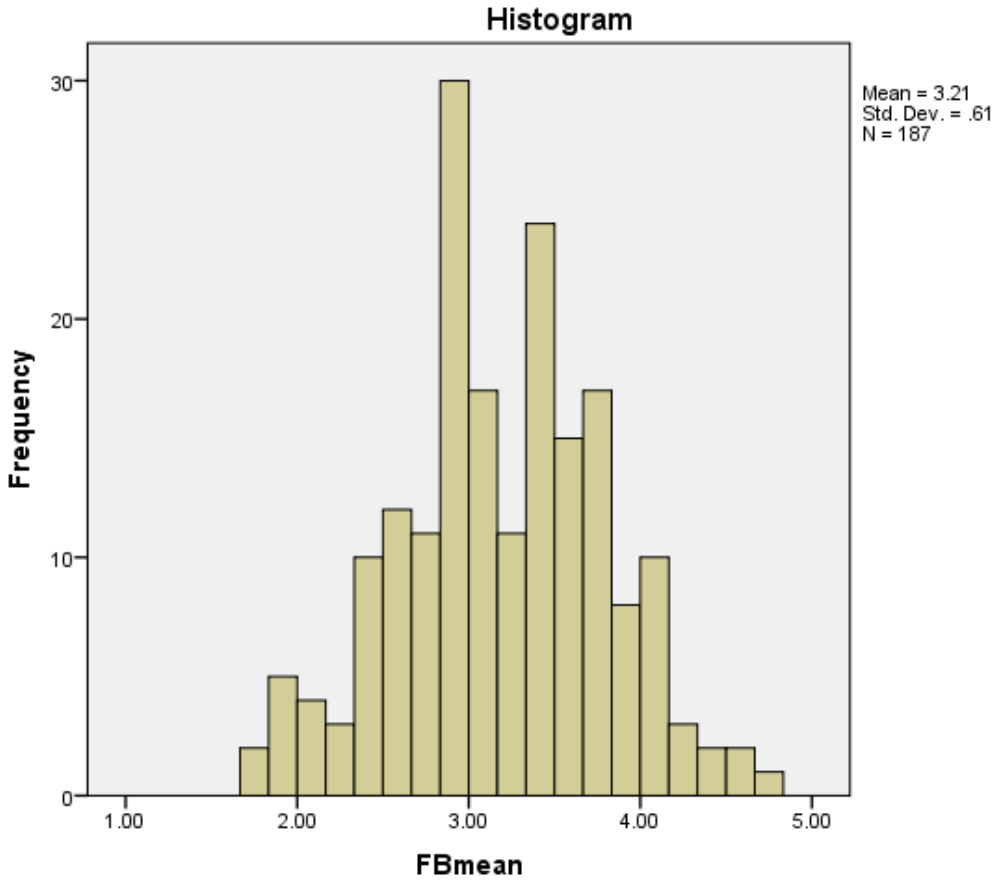


Figure 10: Frequency of FBmean Histogram

Financial Literacy

From the 187 valid respondents who filled the survey, 21 are financially illiterate having responded all the three questions wrong and scored 0/3. 49 respondents, forming 26.2% of the total sample, scored 1/3 whereas the majority of my sample, 71 respondents, forming 38% of the total sample scored 2/3. 46 respondents answered the three questions related to financial literacy totally correct scoring 3/3. Hence, the mean financial literacy rate of my

sample is 1.7594/3 (58.65%) and the range goes from 0, the minimum possible, to 3, the maximum possible. The results are presented in Figure 10 and Table 19.

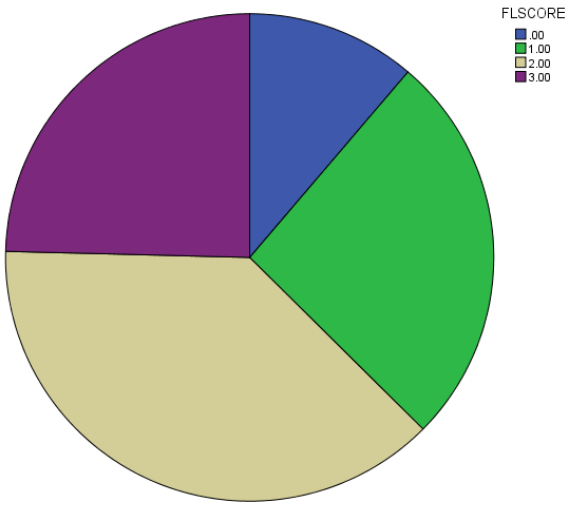


Figure 11:FL Distribution Pie Chart

Emotional Intelligence

From the 187 valid respondents who filled the survey, 99.5% have scored higher than the midpoint (2.5/5) possible for emotional intelligence. Around 50% of the respondents have scored EI rates above 3.45/5, as shown by the median. The mean is 3.4356/5, the standard deviation 0.351 and the range 2.15 starting from 2.35/5 as the lowest value to reach 4.5/5 as the highest value. The global EI average score being 3.125/5 (SixSeconds, 2018) and more of the half of all the respondents having scored higher than 3.45/5, the sample base of this research is above-average emotionally intelligent. The results are presented in Appendix C.

5.2 Socio-Demographic Effects on the Model's Variables

Gender Effect

By conducting an "Independent t-test" between genders with respect to the three research variables – financial behavior mean, financial literacy score, emotional intelligence mean – the only statistically significant result appears with financial behavior with p-value=0.023<0.05 where males scored significantly higher than females. However, no statistically significant difference was found between males and females when it came to FL (p-value=0.615>0.05) and to EI (p-value=0.865 >0.05). The results are presented in Appendix E.

Age Effect

The "One-Way ANOVA" test shows no statistically significant difference amongst the different age groups when it comes to FB (p-value=0.698 >0.05), FL (p-value=0.695 >0.05), or EI (p-value=0.764 >0.05). The results are presented in Appendix E.

Education Level Effect

Emotional Intelligence score showed a significant difference between different education levels (p-value = 0.027<0.05 presented in Figure). People who did not go to university showed significantly lower EI score (mean=3.1364) than those who did (mean = 3.4250 and p-value = 0.023 for undergraduate, mean = 3.4453 and p-value = 0.006 for graduate, mean = 3.4816 and p-value = 0.003 for post-graduate). However, FB score was not significantly different for the different educational levels (p-value = 0.731 > 0.05), nor was there a difference for FL score (p-value = 0.229 > 0.05). Nonetheless, though the ANOVA is not significant, the "Post Hoc – Multiple Comparisons" test shows a significant difference of financial literacy between people

having a maximum educational level as high school and people having a minimum educational level as university graduates (p-value = 0.045 < 0.05 for graduates and p-value = 0.047 < 0.05 for post-graduates) . Hence, higher educational levels enhance the EI scores of people. In addition, FL scores are enhanced solely at graduate and post-graduate levels. All the results are presented in Appendix E.

Education Field Effect

Having a dichotomous variable in assessing the education field of the respondents (business or non-business related), conducting an independent t-test is the best option to check if there's a significant difference of means between the two groups. The results show a significantly higher score on FL for respondents with business-related education than those whose education is non-business related (p-value = 0.000) confirming findings in literature. However, no statistically significant difference was found between business and non-business related education for FB nor for EI (p-value = 0.204 for FB and p-value = 0.903 for EI). The results are presented in Appendix E.

Years of Experience Effect

FB score was not significantly different for the different years of experience (p-value – 0.661) neither were FL (p-value = 0.921) nor EI (p-value = 0.830). The results are presented in details in Appendix E.

Personal Monthly Income Effect

The "One-Way ANOVA" shows a significant result between EI and personal monthly income (p-value=0.04). There's a statistically significant result of EI mean difference between people earning "1801$ and more" and people earning either a maximum of 800$ per month or between 1201$ to 1800$ per month. However, there is no significant difference of EI levels for people earning between 800-1200 and the ones earning 1201$ and more (p-value = 0.367).

Though the ANOVA test shows no significance, after running "Post-Hoc – Multiple Comparisons" test, a significant difference in the financial literacy means between people earning 800$ at most and 1200$ at least (p-value=0.045 and 0.033 respectively for the personal monthly income brackets of "1201-1800$" and "1801$ and more"). Hence, higher earning categories show higher rates of EI than the lowest earning category. Results are presented in Appendix E.

5.3 Scale Reliability

Cronbach's Alpha was used to test for reliability of the Financial Behavior (FB) scale and Emotional Intelligence (EI) scale. Cronbach's Alpha tests the internal consistency of a certain group of questions forming a scale (Goforth, 2015). The coefficient ranges from 0 to 1. Usually, the higher the coefficient, the better is the Cronbach's Alpha (Goforth, 2015). However, as per general rule, any value below 0.5 is rejected, and value above 0.65 is acceptable (Goforth, 2015). Very high coefficients such as 0.95 are also worrying due to high probability of different questions calculating exactly the same phenomenon (Goforth, 2015). The coefficient of the financial behavior scale is 0.649 and the one of the emotional intelligence

scale is 0.659. Whereas the Cronbach Alpha of the Cash Management is 0.213, Credit Management 0.220 and Savings & Investments subscale is 0.685. Nonetheless, Dew and Xiao (2011) having obtained low Cronbach's Alphas themselves for Cash Management and Credit Management subscales, they recommended to ignore them as valid standalone scales. Hence, showing a moderate reliability for the three scales – FB, EI and Savings & Investments, the means scores will be used to measure the variables.

5.4 Hypotheses Testing

H1: The higher the financial literacy of a Lebanese banking consumer, the higher the financial behavior scale score

The first hypothesis of my research tests the positive relation between financial literacy and financial behavior for the Lebanese banking consumers. The simple linear regression (represented in Table 1) with the dependent variable being financial behavior scale score mean and the independent variable being the financial literacy score, shows a regression line FB= 3.141 + 0.04FL. H1 cannot be supported due to a no statistically significant result with p-value=0.392>0.05.

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.141	.094		33.366	.000
	FLSCORE	.040	.047	.063	.858	.392

a. Dependent Variable: FBmean

Table 1: Simple Linear Regression with Y=FB and X=FL

H2: The higher the emotional intelligence quotient of a Lebanese banking consumer, the higher the financial literacy rate

The second hypothesis of my research tests the positive relation between emotional intelligence and financial literacy. The simple linear regression with the dependent variable being "financial literacy score" and the independent variable being "emotional intelligence score mean", shows a regression line FL= -0.343 + 0.612EI. As EI score increases by 1 point (on a scale from 1 to 5), the FL average score is expected to be higher by 0.612 points. H2 can be supported due to a statistically significant result with p-value=0.002<0.05. The variation of the emotional intelligence average score explains around 5.2% of the variation of the financial literacy score (as Rsquared =0.052 presented in Table 3).

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.343	.660		-.520	.603
	EImean	.612	.191	.229	3.204	.002

a. Dependent Variable: FLSCORE

Table 2: Simple Linear Regression with Y=FL and X=EI

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.229[a]	.052	.047	.92582

a. Predictors: (Constant), EImean

Table 3: Model Summary of the Simple Linear Regression with Y=FL and X=EI

H3: The higher the emotional intelligence quotient of a Lebanese banking consumer, the higher the financial behavior scale score

The third hypothesis of my research tests the positive relation between emotional intelligence and financial behavior. The simple linear regression with the dependent variable being the "financial behavior scale score mean" and the independent variable being the "emotional intelligence score mean", shows a regressions line FB= 3.491 – 0.83EI. H3 cannot be supported due to a non-statistically significant result with p-value=0.710>0.05 (presented in Table 4).

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.491	.439		7.957	.000
	EImean	-.083	.127	-.048	-.652	.515

a. Dependent Variable: FBmean

Table 4:Simple Linear Regression with Y=FB and X=EI

H4a: Emotional intelligence mediates the relationship between financial literacy and financial behavior

The fourth hypothesis tests the mediation of emotional intelligence of the relation between financial literacy and financial behavior. Model 4, simple mediation as per Hayes (2013), was ran on IBM SPSS's PROCESS add-on with Y= "financial behavior scale score mean" , X= "financial literacy score" and M= "emotional intelligence score mean". No mediation effect was found due to a lack of statistically significant results with p-value= 0.5854>0.05 for the model fit, p-values=0.3348 and 0.5602 for the model's variables and p-value=0.3348 for the direct effect of financial literacy on financial behavior. Another way to explain the significance of a study by using the Process macro is to check the LLCI and ULCI. If there's no "0" between them both, the relation or role is significant. In this case, the LLCI and ULCI of the variables and their interaction all possess a "0" between them showing that the mediation is not significant. None of the variables have a same-sing LLCI and ULCI (-0.0488 and 0.1425 for financial literacy score, -0.3356 and 0.1824 for emotional intelligence).

Due to the lack of any statistically results, I explored further the data by checking the moderated mediation role of emotional intelligence on the relationship between financial literacy and financial behavior. In order to check the latter, Model 1, simple moderation must be checked first. Model 74 allows up to 10 mediators operating in parallel. PROCESS does not produce a table of conditional direct effects for model 74. With only one mediator, I used model 1 to generate the conditional direct effects, specifying M as moderator

By running Process V.3.2 by A. Hayes, an add-on macro for IBM SPSS, Model 1 (Hayes, 2013) (Presented in Figures 13 and 14), with Y= "financial behavior scale score mean", X= "financial literacy score" and M= "emotional intelligence score mean", there is no moderation effect due to a lack of statistically significant results with p-value=0.2874>0.05 for the model fit, p-values=0.1257/0.0840/0.1012 for the model's variable and p-value=0.1012>0.05 for the

unconditional effect. In this case, the LLCI and ULCI of the variables and their interaction all possess a "0" between them showing that the moderation is not significant. (The results are presented in Appendix D).

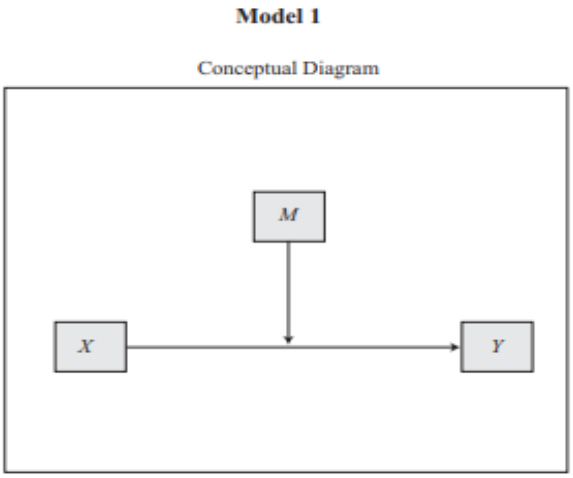


Figure 12: Process Model 1 Conceptual Diagram

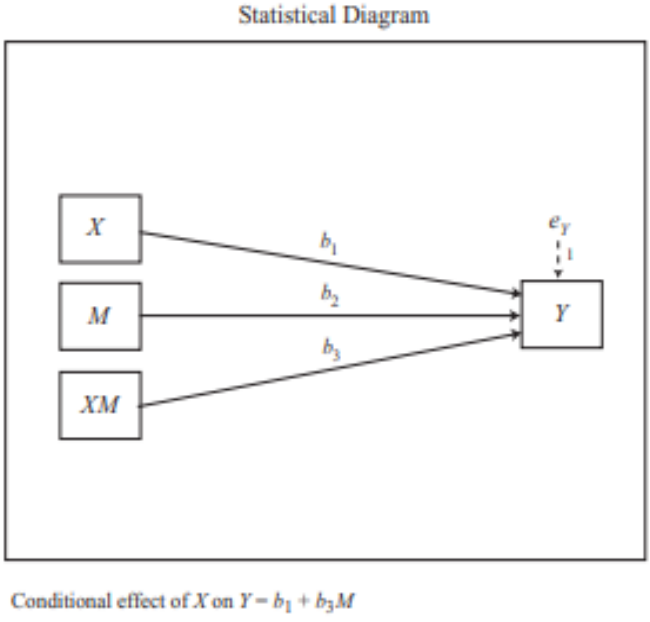


Figure 13: Process Model 1 Statistical Diagram

Model 74, moderated mediation (presented in Figures 17 and 18), in Process (Hayes, 2013) presents a framework where a variable X moderates the relation of a mediator M and a dependent variable Y. It is represented in the following figure:

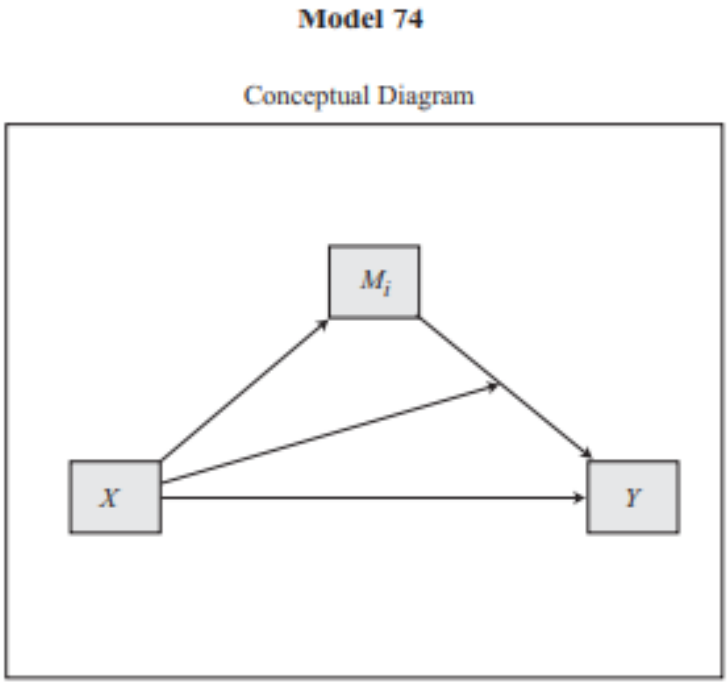


Figure 14: Process Model 74 Cocneptual Diagram

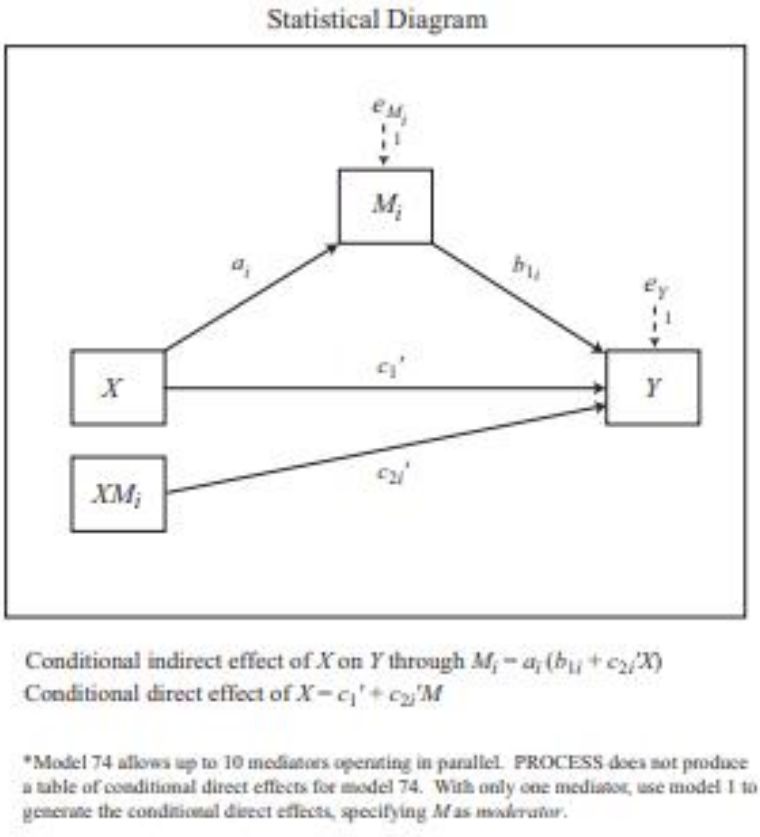


Figure 15: Process Model 74 Statistical Diagram

As it resembles the model of my research, with X=EI, M=FL and Y=FB, the regression using Process V.2.16. by A. Hayes, an add-on macro for IBM SPSS, shows no-statistically significant results. Neither the model nor the relations between the variables are statistically significant with a p-value=0.2874>0.05 for the total model. However, the relation between EI and FL is significant with a p-value= 0.0016<0.05 with a regression line FL= -.3681 + 0.6193EI and a Rsquared= 0.0523. This relation proves the simple linear regression ran to check the significance of H2. There is also a positive conditional indirect effect for EI mean scores higher than 3.7867 with a coefficient of 0.0832 due to the LLCI=0.0032 and ULCI=0.2178. This means that the lower and upper bounds of the true value of this effect do not cross through 0= "no effect". However, as the confidence interval of the index of the moderated mediation includes a 0 with LLCI=-0.0111 and

ULCI=0.3763, there is no significant difference between the levels of conditional indirect effects. Therefore, there is no significant indirect effect of financial literacy for scorers of high EI on their financial behaviors. (The results are presented in Appendix D).

H4b: Emotional intelligence mediates the relationship between financial literacy and savings and investments

The fifth hypothesis tests the mediation of emotional intelligence of the relation between financial literacy and savings and investments behavior. Model 4, simple mediation as per Hayes (2013), was ran on IBM SPSS's PROCESS add-on with Y= "savings and investments score mean", X= "financial literacy score" and M= "emotional intelligence score mean". No mediation effect was found due to a lack of statistically significant results with p-value= 0.2755>0.05 for the model fit, p-values=0.1185 and 0.4730 for the model's variables and p-value=0.1185 for the direct effect of financial literacy on savings and investments behavior. None of the variables have a same-sign LLCI and ULCI (-0.0306 and 0.2674 for financial literacy score, -0.5505 and 0.2564 for emotional intelligence).

Due to the lack of any statistically results, I explored further the data by checking the moderated mediation role of emotional intelligence on the relationship between financial literacy and savings & investments behavior. Model 74 allows up to 10 mediators operating in parallel. PROCESS does not produce a table of conditional direct effects for model 74. With only one mediator, I used model 1 to generate the conditional direct effects, specifying M as moderator.

By running Process V.3.2 by A. Hayes, an add-on macro for IBM SPSS, Model 1 (Hayes, 2013) (Presented in Figures 13 and 14), with Y= "savings and investments subscale average", X=

“emotional intelligence score mean” and M= “financial literacy score”, there is a moderation effect due to statistically significant results with p-value=0.0352<0.05 for the model fit, p-values=0.0230/0.0119/0.0144 for the model’s variable and p-value=0.0144<0.05 for the unconditional effect (The results are presented in Appendix D). Higher rates of emotional intelligence enhance the usage of financial literacy in order to make better financial decisions as the p-value of the conditional effects is equal to p-value=0.0041 with LLCI=0.1045 and ULCI=0.5475, and the effect is 0.3260.

Having supported the existence of a moderation effect of EI between the relation of financial literacy and savings & investments behavior, the moderated mediation (Model 74 by A. Hayes in Process, add-on macro for IBM SPSS) showed the following results (presented in Appendix D).

The model summary p-value=0.0352<0.05 and the p-values of all the variable – emotional intelligence score mean, financial literacy score mean and their interaction – are less than 5% which proves the relations to be statistically significant. Nonetheless, the relations of the variables are negative. Financial literacy’s coefficient is -1.6554 and emotional intelligence’s coefficient is -1.1621. Also, there is a conditional indirect effect of EI on FB with the mediation of FL for the EI average scores higher than 3.4356 where LLCI=0.0051 and ULCI=0.2193 and an effect of 0.854. The coefficient of the conditional indirect effect increases with the increase of EI as it reaches to 0.1989 for the EI mean scores of 3.7867. Having no “0” between the LLCI and ULCI, of the moderated mediation index with LLCI=0.0695 and ULCI=0.7279, the moderated mediation effect is significant.

Chapter 6: Discussion

The variables of this research are financial behavior (with a concentration on savings & investment behavior), financial literacy and emotional intelligence.

Starting with the gender factor, the output of my research showed a significant difference in the financial behaviors of males and females. Males, according to my data, act financially wiser than females (FBmales= 3.3291 FBfemales=3.1251). As males are responsible of managing their households, they act financially wiser than their female counterparts. Nonetheless, both of them have the same levels of financial literacy (supporting Ooko, 2017 and Assaad, 2013) and emotional intelligence as I found no significant difference between the means. Financial literacy is acquired by education and as education is available to all in Lebanon, no matter what the socio-demographics of a person, it is logical to have financial literacy rates equal between the two genders.

The output of the influence of age to the research variables shows no significant results. This contradicts the majority of the research works done till date. As for the financial behavior and financial literacy, researchers claim an Inverted U-shaped relation to exist such as Atkinson and Messy (2011), Assaad (2013) and Lusardi and Mitchell (2014). They claim that the scorers of highest levels of financial literacy therefore the financially wisest are the middle-agers. Whereas, emotional intelligence increases over time and reaches to its peak when a person becomes 60 years old (Stillman, 2018). In my sample, only 9.1% are below 25 and only 8% are above 50. Therefore, the insignificance of the age factor might be related to the low number of member groups I have in my sample.

Education shows some interesting relations with the research variables. First of all, a significant result was found between the financial literacy rates of people coming from business and non-

business educational backgrounds confirming the claim of Ooko (2017). The following relation exists most probably due to the additional knowledge of notions and meanings of financial terms educationally business backgrounded people acquired during their years of study. Another significant result was also found between the financial literacy rates of people coming from different educational levels. There's a significant difference between people who maxed their education to high school or minimalized the latter to graduate studies. These results are quite similar to Ooko (2017)'s results. Emotional intelligence levels also significantly differ by people's levels of education. Easily put, the higher the education, the higher the emotional intelligence. As mentioned in the previous paragraph, EI can be nourished and advances through time. With pursuing higher levels of education, a person gets older and faces novel situations which forces him/her to use his/her intelligence to overcome them. Hence, the EI is increased. Furthermore, people who have higher rates of emotional intelligence score higher academically (Brackett, Rivers, & Salovey, 2011; Dahl & Cilliers, 2012; Brown, Henchoz, & Spycher, 2017).

As for the years of experience there is no significant result with the research's variables. This implies that none of our research variables – financial behavior, financial literacy and emotional intelligence – are affected by years of experience at work.

Personal monthly income though shows significant results with emotional intelligence. The highest earners, 1800$ and more, tend to have significantly higher emotional intelligence rates than the lowest earners, 800$ or less. This is due to the higher need of social competences in life for high earners as each person socializes according to his socio-economic status. High earners usually hold managerial or executive positions forcing them to be at their best all the time in respecting norms and values. Therefore, they ought to be highly aware of their emotional state and the one of their communication partners quite often and be able to manage them to their benefit.

Personal monthly income also shows a significant difference in people's financial literacy rates between people earning more than 1201$ per month and people earning a maximum of 800$ per month. The key term here is investments. Classical economic theories and even the ones before them such as Ibn Khaldun's, explain the importance of investments and their interconnectedness with people's incomes. The more a person earns, the more propensity will s/he have to invest his/her money they claim. In order to make good investment decisions, people tend to get at least a simple financial knowledge. The money invested being the money in surplus, then the richer people will have a higher possibility of investing therefore the significant relation between financial literacy and personal monthly income.

I was unable to find significant results for my first hypothesis, H1, which tests the positive relation between financial literacy and financial behavior. By theory and many empirical research works, financial literacy influences positively and directly the financial behaviors of people (Lusardi, 2008; Lusardi, Mitchell, & Curto, 2010; Lusardi & Mitchell, 2011; Lusardi & Mitchell, 2014; Sayinzoga, Bulte, & Lensink, 2016; Ooko, 2017). According to the proponents of this approach, the knowledge and the know-how of financial matters boosts a person's wise financial behaviors. Nonetheless, the results I got show the opposite – no significant effect of financial literacy on financial behavior. Willis (2008) already criticized the non-significant relation I have found. The knowledge of an information isn't alone enough for it to be used (Willis, 2008). One must remember it to be able to use it (Willis, 2008).

As for the H2, the emotional intelligence is able to explain 5.2% of the variation of financial literacy. There's a significantly positive relation between them both with a coefficient of 0.612 which means, if we increase the emotional intelligence average score of a person by 1 point, the financial literacy of that person will increase by 0.612 on a score of 3. As explained in the previous

parts, financial literacy is taught and emotional intelligence was proved to help people in education (Brackett, Rivers, & Salovey, 2011; Dahl & Cilliers, 2012; Checa & Fernandez-Berrocal, 2015).. Increasing one's knowledge in order for it to be implemented in a given behavior requires good cognitive abilities. Hence, in order to increase people's financial literacy, we should increase people's emotional intelligence.

Regarding H3, I wasn't able to find statistically significant results to support any relation between emotional intelligence and financial behavior. In theory, there should have been a positive relation between them. Nonetheless, as per the output of my data, the p-value of the simple linear regression is higher than 0.05, therefore H3 cannot be supported. One of the reasons could be the focus of Lebanese banking consumers on intuition while making a financial decision rather than reasoning. The Economics Nobel Prize Laureate of 2002, Daniel Kahneman, focusing his research in the field of behavioral economics, reasoned the existence of two modes of decision making: intuition and reasoning (McAuley, 2009; Lerner, Li, Valdesolo, & Kassam, 2015). Both of the modes can be helpful and hurtful, argues Kahneman. Therefore, the importance is to know which mode to apply in every situation (McAuley, 2009). Intuition is the rapid and quick processing of the minute available information in hand and taking a decision, whereas reasoning is the thorough processing of all the data available in a comparative and systematic way before taking any decision (Butler, Guiso, & Jappelli, 2014). Butler, Guiso and Jappelli (2014) argue that the intuition lets people take quick choices even if bad, whereas the reasoning helps individuals take a wise choice on the expense of the opportunity of losing the best choice.

The fourth and fifth hypotheses of my research, H4a and H4b test the mediation of emotional intelligence of the relation between financial literacy and financial behavior (H4a) and between financial literacy and savings and investment behavior (H4b).

H4a is not supported due to the lack of significant results. In addition, there is no significant result for the conditional indirect effect of financial literacy on financial behavior when emotional intelligence is high. Similarly, when further exploration of the data was done, the results were still the same. One of the reasons for not finding a statistically significant result for H4a could be the use of financial literacy scales which are influencing factors on the savings and investments behavior and not all the financial behaviors such as cash management and credit management. In addition, having no significant results in testing for a hypothesis backed by literature is an interesting reason to check it with a different sample.

As for H4b in which emotional intelligence has a mediation role on the relationship of financial literacy and savings & investment behavior, I found no statistical significance to accept it. The background of this claim is the fact that emotional intelligence influences on the educational processes, a relation which has been discussed and proven significant in H2. Nonetheless, the further exploration shawed some interesting outcomes. According to the output of the research, the higher the emotional intelligence rate, the less wise savings & investments behavior people have. According to Grinblatt, Keloharju and Linnainma (2012), high self-esteem might be causing this as people who are emotionally intelligent believe themselves not needing any further help in making sound savings and investments decisions. This conclusion of mine can be empowered through checking the changes of significance for different levels of financial literacy. For low levels of financial literacy, there is a negative relationship between emotional intelligence and savings & investment. Therefore, for respondents who are not financially literate, as emotional intelligence increases, the score on savings & investment decreases. This means that low financial literacy rates have quite a severe influence on people's savings and investment behavior regardless to the emotional intelligence level a person has. However, for people with moderate and high

financial literacy, the higher the emotional intelligence the better are the savings & investments decisions. Hence, as emotional intelligence could actually influence negatively on the savings & investments behavior of people having low financial literacy rates, in order to have people who make sound savings & investments, we need to increase mutually the emotional intelligence and financial literacy. Financial literacy also shows a remarkable change from the mainstream arguments about its positive relation to financial behaviors. According to my data's output, financial literacy reduces the wise savings & investments behaviors of people. A major argument could be agreeing with Willis (2008)'s claim on financial literacy not being the only determinant for having a good financial behavior which opens doors for future research.

Chapter 7: Conclusion

7.1 Contribution

My research's contribution is twofold: academic and managerial.

7.1.1 Academic

It opens new gateways in the behavioral finance discipline by introducing emotional intelligence as an influencing factor on people's financial behaviors. By testing my hypotheses, I was able to find a significant answer to my research question: "What is the role of emotional intelligence between financial literacy and financial behavior?". Therefore, a contribution of my research is the fact that financial literacy and emotional intelligence do not influence financial behavior, rather they influence a type of it which is savings & investments. My research also reduces the gap in literature on researching financial literacy rates and financial behaviors of Lebanese banking consumers as claimed by Daou (2017, a).

7.1.2 Managerial

Respondents having business related education scored higher financial literacy rates than respondents having non-business related education. Hence, a managerial contribution of my research could be the necessity of financial education no matter what the discipline one follows. In other terms, I would recommend educational curriculum caretakers to include courses enhancing financial knowledge in all disciplines.

7.2 Limitations

One of the limitations to my research is the concentration of my sample on the Lebanese bank consumers having either a debit or a credit card. I had made such a decision as my financial behavior scale, FMBS, is based on banking consumers by asking about loans, credit cards and so. Noting that I used the mentioned scale, where the Cronbach alpha is around 0.66, this might have caused a problem in showing the true financial behavior of the Lebanese bank consumers (as it is recommended to be higher than 0.7). Another major limitation is the fact that I was able to gather 187 respondents only using convenient sampling which might not be a good reflector of the true Lebanese banking consumer population. Lack of available complete scales for measuring cash management and credit management under FB didn't permit me to check the relations of the variables further. For sure, the limited time and funds constraints played their role in limiting the boundaries of this research.

7.3 Recommendations

Having found significant results between emotional intelligence, financial literacy and savings & investments behavior only after having explored the data further, I would suggest the following three recommendations. First, future research on financial behaviors should be conducted based on savings & investments behaviors and not on financial behavior itself. In other terms, I would recommend diversifying the future research works based on the type of financial behavior. Second, check why financial literacy and emotional intelligence have negative results on people's savings & investments behaviors. Third, use moderated mediation in checking the relation of the three variables.

Due to a low Cronbach's alpha in the used financial behavior scale, I would recommend future research works to be conducted in order to develop a financial behavior scale fit to the Lebanese culture.

I would also recommend new research works to check the relation, if any, of cash management and credit management with financial literacy and emotional intelligence using more specific scales.

I would also like my research to be conducted once again with a larger sample size in order to be able to put forward stronger arguments about financial literacy and financial knowledge in Lebanon. Not only that, it would be good if a comparative study takes place between Middle Eastern countries by which it might be able to find a model of financial behaviors on the Middle Eastern culture.

Similarly, it would also be worth studying deeply the socio-demographics of financial literacy and financial behaviors as I found some very interesting outcomes reflecting the true situation in Lebanon. These studies could help policymakers in forming more efficient and more effective financial literacy enforcing programs as well as enacting specific policies enhancing people's financial literacy rates.

Capital Market Authority and financial investments being new to the Lebanese culture (Daou, 2017 (a)), it would be worth studying the relation of investment activity rates of people on their general financial skills: literacy and behaviors.

In addition, financial literacy scale being based on only three levels: inflation, interest and risk, all being highly related to savings and investments, I would suggest finding a more comprehensive scale in which not only savings and investments behaviors are taken into consideration, but also cash management and credit management.

As per the results I got, when people's emotional intelligence is high but the financial literacy is low, or when people's emotional intelligence is low but the financial literacy is high, people commit wrong financial behaviors most probably by relying on their assumed 'correct' knowledge. This significant result of the conditional indirect effect of emotional intelligence and financial literacy on the savings & investments behavior of people leads me to my final recommendation. I would recommend enhancing people's emotional intelligence and financial literacy together in order to have people with a better savings & investments behavior.

8. References

Agence France Press. (2018, May 9). *Lebanon Elects Six Women To Parliament*. Retrieved from The Daily Star - Lebanon: http://www.dailystar.com.lb/News/Lebanon-Elections/2018/May-09/448633-lebanon-elects-six-women-to-parliament.ashx

Alkailani, M., Azzam, I. A., & Athamneh, A. B. (2012). Replicating Hofstede in Jordan: Ungeneralized, Reevaluating the Jordanian Culture. *International Business Research* , Vol. 5, No. 4.

Anotonios, D., & Mikhael, M. (2017). *Lebanese Banks' Performance in 2016.* Beirut : BlomInvest Bank.

Aren, S., & Aydemir, S. (2015). The Moderation of Financial Literacy on the Relationship Between Individual Factors and Risky Investment Intention. *International Business Research* , Vol.8, No.6.

Asaad, C. T. (2013). *Two Essays in Finance: Cultural Finance and Behavioral Financial Literacy.* Kent State University Graduate School of Management.

Association of Banks in Lebanon. (2018 a). Retrieved from Categories of Banks: http://www.abl.org.lb/allclassification.aspx?pageid=129

Association of Banks in Lebanon. (2018 b). Retrieved from Main Indicators by the End of 2016: http://www.abl.org.lb/subPage.aspx?pageid=7337

Atkinson, A., & Messy, F.-A. (2012). Measuring Financial Literacy: Results of the OECD/International Network on Financial Education (INFE) Pilot Study. *OECD Working Papers on Finance, Insurance and Private Pensions, No. 15*. OECD Publishing.

BANKDATA. (2018). Retrieved from Bilanbanques 2018: http://verio.bankdata.com/BBDec/2018/BBManual.pdf

Banque du Liban. (2018 a). Retrieved from Banking and Finance: History: http://www.bdl.gov.lb/banking-and-finance.html

Banque du Liban. (2018 b). Retrieved from Commerical Banks Consolidated Balance Sheet - Assets: http://www.bdl.gov.lb/webroot/statistics/table.php?name=tsid4a

Banque du Liban. (2018 c). Retrieved from Financial Institutions Consolidated Balance Sheet: http://www.bdl.gov.lb/webroot/statistics/table.php?name=tsid13

Banque du Liban. (2018 d). Retrieved from Banks: http://www.bdl.gov.lb/downloads/index/4/248/Banks.html

Banque du Liban. (2018 e). Retrieved from Foreign Banks Representative Offices in Lebanon: http://www.bdl.gov.lb/downloads/index/4/80/Foreign-Banks'-Representative-Offices-in-Lebanon-.html

Banque du Liban. (2018 f). Retrieved from Number of Outstanding Payment Cards: http://www.bdl.gov.lb/webroot/statistics/table.php?name=t515-2

Banque du Liban. (2018 f). Retrieved from Points of Sales (POS): http://www.bdl.gov.lb/webroot/statistics/table.php?name=t515-5

Banque du Liban. (2018 g). Retrieved from Settled Cheques in Lebanese Pounds: http://www.bdl.gov.lb/webroot/statistics/table.php?name=t51-16

Banque du Liban. (2018 h). Retrieved from Checks Cleare in Foreign Currencies: http://www.bdl.gov.lb/webroot/statistics/table.php?name=t51-17

Batool, B. F. (2013). Emotional Intelligence and Effective Leadership. *Journal of Business Studies Quarterly*, Vol.4, No.3, PP. 84-94.

Beugelsdijk, S., Kostova, T., & Roth, K. (2017). An Overview of Hofstede-Inspired Country-Level Culture Research in International Business in 2006. *Journal of International Business Studies*, 48, 30-47.

Brackett, M., Rivers, S., & Salovey, P. (2011). Emotional Intelligence: Implications for Personal, Social, Academic and Workplace Success. *Social and Personality Psychology Compass*, 88-103.

Brown, M., Henchoz, C., & Spycher, T. (2017). Culture and Financial Literacy. *SoF - HSG*, School of Finance Working Paper Series 2017/03.

Bryant, S. E., & Malone, T. I. (2015). An Empirical Study of Emotional Intelligence and Stress in College Students. *Business Education & Accreditation*, Vol.7, No.1, PP. 1-11.

Butler, J., Guiso, L., & Jappelli, T. (2014). The Role of Intuition and Reasoning in Driving Aversion to Risk and Ambiguity. *Theory and Decisions*, Volume 77, Issue 4, pp 455–484.

Byblos Bank. (2018). Retrieved from Financial Literacy : https://www.byblosbank.com/csr/major-programs/financial-literacy

Case, D. (2012, October 24). *America's middle class: An endangered species?* Retrieved from PRI: https://www.pri.org/stories/2012-10-24/americas-middle-class-endangered-species

Central Administration of Statistics. (2013). Retrieved from Population Characteristics in 2009: http://www.cas.gov.lb/index.php/demographic-and-social-en/population-en

Checa, P., & Fernandez-Berrocal, P. (2015). The Role of Intelligence Quotient and Emotional Intelligence in Cognitive Control Processes. *Frontiers in Psychology*, (6) 1853.

Conte, J. (2005). A Review and Critique of Emotional Intelligence Measures. *Journal of Organizational Behavior*, 26, 433-450.

Dahl, D., & Cilliers, F. (2012). The Relationship Between Cognitive Ability, Emotional Intelligence and Negative Career Thoughts: A Study of Career-Exploring Adults. *SA Journal of Human Resource Management*, Vol 10, No 2.

Daou, R. A. (2017 (a)). *The Impact of Consumer Education on Consumer Protection in the Perception of the Lebanese Banking Consumer.* Grenoble: Grenoble Ecole de Management.

Daou, R. A. (2017 (b)). Consumer Education and Consumer Protection: The Perception of the Lebanese Banking Consumer. In E. Bassil Sleilati, *Lebanon: Social, Political and Economic Issues* (pp. 199-228). New York: NOVA Science Publishers.

Dew, J., & Xiao, J. J. (2011). The Financial Management Behavior Scale: Development and Validation. *Journal of Financial Counseling and Planning*, Volume 22, Issue 1.

Dickens, W. (2008). Cognitive Ability. In S. Durlauf, & L. Blume, *The New Palgrave Dictionary of Economics.* Palgrave Macmillan.

Emerling, R. (2017). *Measures: The Proifle of Emotional Competence*. Retrieved from Consortium for Research on Emotional Intelligence in Organizations: http://www.eiconsortium.org/measures/pec.html

Engelberg, E., & Sjoberg, L. (2006). Money Attitudes and Emotional Intelligence. *Journal of Applied Social Psychology*, 36, 8, pp. 2027–2047.

Federal Reserve. (2018). Retrieved from Assets and Liabilities of Commercial Banks in the United States - H.8: https://www.federalreserve.gov/releases/h8/current/default.htm

Fernandes, D., Lynch, J. G., & Netemeyer, R. G. (2014). Financial Literacy, Financial Education, and Downstream Financial Behaviors. *Management Science*, 1861-1883.

Fernandez-Berrocal, P., & Checa, P. (2016). Emotional Intelligence and Cognitive Abilities. *Frontiers in Psychology*, 7:955.

Goforth, C. (2015, November 16). *Using and Interpreting Cronbach's Alpha.* Retrieved from University of Virginia Library: https://data.library.virginia.edu/using-and-interpreting-cronbachs-alpha/

Goleman, D. (1995). *Emotional Intelligence: Why It Can Matter More Than IQ.* New York: Bantam Books.

Goleman, D. (1996). *Working With Emotional Intelligence.* London: Bloomsbury.

Gondal, U. H., & Husain, T. (2013). A Comparative Study of Intelligence Quotient and Emotional Intelligence: Effect on Employees' Performance. *Asian Journal of Business Management*, 5(1): 153-162.

Grinblatt, M., Keloharju, M., & Linnainmaa, J. (2011). IQ and Stock Market Participation. *The Journal of Finance*, Vol LXVI, No. 6, (2121-2164).

Grinblatt, M., Keloharju, M., & Linnainmaa, J. T. (2012). IQ, Trading Behavior and Performance. *Journal of Financial Economics*, 104, (339-262).

Grohmann, A., & Menkhoff, L. (2015). School, Parents, and Financial Literacy Shape Future Financial Behavior. *DIW Economic Bulletin*.

Hayes, A. (2013). *Introduction to Mediation, Moderation, and Conditional Process Analysis.* New York: The Guilford Press.

Head, L. S.-W. (2014). Influences on Financial Knowledge and Behavior. *Journal of Consumer Education*, 30, (59-74).

Henager, R., & Cude, B. (2016). Financial Literacy and Long-and-Short-Term Financial Behavior in Different Age Groups. *Journal of Financial Counseling and Planning*, 27(1), 3-19.

Hill, R. (1998). What Sample Size is "ENOUGH" in Internet Survey Research? *Interpersonal Computing and Technology: An Electronic Journal for the*, Vol 6 No 3-4.

Huston, S. (2010). Measuring Financial Literacy. *The Journal of Consumer Affairs*, Vol 44, No. 2, 296-316.

Kacen, J., & Lee, J. A. (2002). The Influence of Culture on Consumer Impulsive Buying Behavior. *Journal of Consumer Psychology*, 12(2), 163–176.

Kahneman, D., & Tversky, A. (1979). Prospect Theory: An Analysis of Decision under Risk. *Econometrica*, 47(2), pp. 263-291.

Keyes, K., Platt, J., Kaufman, A., & McLaughlin, K. (2016). Association of Fluid Intelligence and Psychiatric Disorders in a Population - Representative Sample of US Adolescents. *JAMA Psychiatry*.

Kumar, S., Watung, C., Eunike, J., & Liunata, L. (2017). *The Influence of Financial Literacy Towards Frinancial Behavior and its Implication on Financial Decisions: A Survey of President University Students in Cikarang - Bekasi.* Bekasi: President University.

Laeven, L., & Valencia, F. (2012). Resolution of Banking Crises: The Good, the Bad, and the Ugly. *Financial Crises* (p. Ch13). IMF.

Laeven, L., Levine, R., & Michalopoulos, S. (2015). Financial Innovation & Endogeneous Growth. *Journal of Financial Intermediation*, 24(1), 1–24.

Lerner, J., Li, Y., Valdesolo, P., & Kassam, K. (2015). Emotion and Decision Making. *Annual Review of Psychology*, 66:33.1-33.25.

Lusardi, A. (2008). Financial Literacy: An Essential Tool for Informed Consumer Choice? *CFS Working Paper* , No. 2008/19.

Lusardi, A., & Mitchell, O. (2011). Financial Literacy Around the World: An Overview. *Journal of Pension Economics and Finance*, 10, 497-508.

Lusardi, A., & Mitchell, O. S. (2014). The Economic Importance of Financial Literacy: Theory and Evidence. *Journal of Economic Literature*, 52(1): 5–44.

Lusardi, A., Mitchell, O., & Curto, V. (2010). Financial Literacy Among the Young: Evidence and Implications for Consumers Policy. *CFS Working Paper*, No. 9.

Mayer, J., & Salovay, P. (1997). What is Emotional Intelligence? In P. Salpvey, & D. Sluyter, *Emotional Development and Emotional Intelligence: Educational Implications* (pp. 3-31). New York: Basic Books.

McAuley, I. (2009). Understanding Human Behavior in Financial Decision Making: Some Insights from Behavioral Economics. *No Interest Loans Scheme Conference "Dignity ina Downturn".* Canberra: Centre for Policy Development.

Mikolajczak, M., Brasseur, S., & Fantini-Hauwel, C. (2014). Measuring intrapersonal and interpersonal EQ: The Short Profile of Emotional Competence (S-PEC). *Personality and Individual Differences*.

Nguyen, T. A., Rozsa, Z., Belas, J., & Belasova, L. (2017). The Effect of Perceived and Actual Financial Knowledge on Regular Personal Savings: Case of Vietnam. *Journal of International Studies*, 10 (2) 278-291.

Nicolini, G., Cude, B., & Chatterjee, S. (2013). Financial Literacy: A Comparative Study Across Four Countries. *International Journal of Consumer Studies*, No. 37 (6) 689-705.

Ooko, R. A. (2017). *Demographic and Socioeconomic Factors Influencing Financial Literacy Among Employees of Deloitte Kenya.* Nairobi: United States International University.

Perez, J. C., Petrides, K., & Furnham, A. (2005). Measuring Trait Emotional Intelligence. In R. Schulze, & R. Roberts, *International Handbook of Emotional Intelligence.* Cambridge: Hogrefe & Huber.

Perovic, B. (2016). *Defining Youth in Contemporary National legal and Policy Frameworks.* European Commission and Council of Europe.

Rinuastuti, H., Hadiwidjojo, D., Rohman, F., & Khusniyah, N. (2014). Measuring Hofstede's Five Cultural Dimensions at Individual Level and its Application to Researchers in Tourists' Behaviors. *International Business Research* , Vol.7, No.12.

Salovey, P. (2006). Applied Emotional Intelligence: Regulating Emotions to Become Healthy, Wealthy and Wise. In J. Ciarrochi, J. P. Forgas, & J. D. Mayer, *Emotional Intelligenc in Everyday Life* (p. 2006). New York: Psychology Press (Taylor & Francis Group).

Sayinzoga, A., Bulte, E., & Lensink, R. (2016). Financial Literacy and Financial Behaviour: Experimental Evidence from Rural Rwanda. *The Economic Journal*, 126: 1571–1599.

Shipley, N. L., Jackson, M. J., & Segrest, S. L. (2010). The Effects of Emotional Intelligence, Age, Work Experience and Academic Performance. *Research in Higher Education Journal*, 1-18.

SixSeconds. (2018). Retrieved from Global Trends in Emotional Intelligence: https://www.bluegg.nl/resources/SOH-2018-EUROPE.pdf

Skagerlund, K., Lind, T., Stromback, C., Tinghog, G., & Vastfjall, D. (2018). Financial Literacy and the Role of Numeracy – How Individuals' Attitude and Affinity With Numbers Influence Financial Literacy. *Journal of Behavioral and Experimental Economics* , Volume 74, Pages 18-25.

Stillman, J. (2018, February 13). *This Is the Age When Your EQ Peaks, According to Science.* Retrieved from Inc. : https://www.inc.com/jessica-stillman/this-is-age-when-your-eq-peaks-according-to-science.html

Stratfor. (2011, June 24). *The Importance of China's Rising Middle Class.* Retrieved from Stratfor.com: https://worldview.stratfor.com/article/importance-chinas-rising-middle-class

Straub, D., Loch, K., Evaristo, R., Karahanna, E., & Srite, M. (2002). Toward a Theory-Based Measurement of Culture. *Journal of Global Information Management*, Vol. 10, No. 1.

Tyyska, V. (2005). *Conceptualizing and Theorizing Youth: Global Perspectives.* London: Ashgate Books.

van Rooij, M., Lusardie, A., & Alessie, R. (2011). Financial Literacy, Retirement Planning, and Household Wealth. *DNB Working Paper*, No. 313.

Weber, E., & Hsee, C. (1999). Models and Mosaics:Investigating cross-cultural differences in risk perception and risk preference. *Psychonomic Bulletin & Review*, 6(4). 611-617.

Willis, L. (2008). Against Financial Literacy Education. *Iowa Law Review*, Vol. 94, No. 08-10.

WorldBank . (2018 a). Retrieved from Indicator: GDP: Lebanon: https://data.worldbank.org/indicator/NY.GDP.MKTP.CD?locations=LB

WorldBank. (2018 b). Retrieved from Indicators: GDP: US: https://data.worldbank.org/indicator/NY.GDP.MKTP.CD?locations=US

Appendix A

Questionnaire

Dear Respondent,

My name is Robert DerMesrobian, I am currently pursuing my MBA in Finance at Haigazian University. The data collected for my thesis will help me assess the factors affecting the levels of financial behavior and knowledge in Lebanon.

Therefore, the survey consists of four sets of questions:

- What you do

- What you think

- How you feel

- About you

On average, this survey takes **8 to 10 minutes** to be completed. Please be honest and answer according to what you really think, feel or do, rather than what you think is considered right. Data will be tackled in general statistical format and not in individual case. So all answers will be anonymous and will remain confidential.

I would like to thank you for completing this survey.

In case you are interested in knowing the outcomes of this research, kindly contact me on my email robertmesrob@gmail.com after January 10, 2019 for further details.

Thank you in advance,

Robert M.K. DerMesrobian

*1. Do you have a debit or a credit card issued by a Lebanese bank?

- Yes
- No

What you do

Please indicate how often you have engaged in the following 12 activities in the past six months:

*2. Compared two or more products when shopping

- Never
- Seldom
- Sometimes
- Often
- Always

*3. Paid all your bills on time

- Never
- Seldom
- Sometimes
- Often

- Always

*4. Kept a written or an electronic record of your monthly expenses

- Never
- Seldom
- Sometimes
- Often
- Always

*5. Stayed in your budget/spending plan

- Never
- Seldom
- Sometimes
- Often
- Always

*6. Paid off credit card balance in full each month

- Never
- Seldom

- Sometimes
- Often
- Always
- N/A

*7. Reached the maximum limit on at least one of your credit cards

- Never
- Seldom
- Sometimes
- Often
- Always
- N/A

*8. Made only minimum payments on a loan

- Never
- Seldom
- Sometimes
- Often
- Always

*9. Began or maintained an emergency savings fund

- Never
- Seldom
- Sometimes
- Often
- Always

*10. Saved money from every paycheck

- Never
- Seldom
- Sometimes
- Often
- Always

*11. Saved for a long term goal such as car, education, home, etc.

- Never
- Seldom
- Sometimes
- Often

- Always

*12. Contributed money to a retirement account

- Never
- Seldom
- Sometimes
- Often
- Always

*13. Bought bonds, stocks or mutual funds

- Never
- Seldom
- Sometimes
- Often
- Always

PREV NEXT

What you think

Kindly answer the following questions to the best of your knowledge

*14. Suppose you had 100$ in a savings account and the interest rate was 2% per year. After 5 years, how much do you

think you would have in the account if you left the money to grow comparing to the initial deposit?

- More
- Less
- Equal
- Don't Know

*15. Imagine that the interest rate on your savings account was 1% per year and inflation was 2% per year. After 1 year, would you be able to buy more than, exactly the same as, or less than today with the money in this account?

- More
- Less
- Equal
- Don't know

*16. Do you think that the following statement is true or false? "Buying a single company stock usually provides a safer return than a stock mutual fund"

- True
- False
- Don’t know

PREV NEXT

What you feel

Research has proven a relationship between a person's emotional status and behavior. The purpose of this section is to assess the relation, if any, between how we feel and our financial behavior specifically.

For the following statements, please indicate your level of agreement

*17. I find it difficult to handle my emotions

- Strongly disagree
- Disagree
- Neither agree nor disagree
- Agree
- Strongly agree

*18. When I am touched by something, I immediately know what I feel

- Strongly disagree
- Disagree
- Neither agree nor disagree
- Agree
- Strongly agree

*19. When I feel good, I can easily tell whether it is due to being proud of myself, happy or relaxed

- Strongly disagree
- Disagree
- Neither agree nor disagree
- Agree
- Strongly agree

*20. I do not always understand why I respond in the way I do

- Strongly disagree
- Disagree
- Neither agree nor disagree
- Agree
- Strongly agree

*21. I can easily get what I want from others

- Strongly disagree
- Disagree
- Neither agree nor disagree

- Agree
- Strongly agree

*22. When I feel low, I easily make a link between my feelings and a situation that affected me

- Strongly disagree
- Disagree
- Neither agree nor disagree
- Agree
- Strongly agree

*23. My emotions inform me about changes I should make in life

- Strongly disagree
- Disagree
- Neither agree nor disagree
- Agree
- Strongly agree

*24. I am good at describing my feelings

- Strongly disagree
- Disagree
- Neither agree nor disagree
- Agree
- Strongly agree

*25. I never base my personal life choices on my emotions

- Strongly disagree
- Disagree
- Neither agree nor disagree
- Agree
- Strongly agree

*26. When I am angry, I find it easy to calm myself down

- Strongly disagree
- Disagree
- Neither agree nor disagree
- Agree
- Strongly agree

*27. I find it difficult to listen to people who are complaining

- Strongly disagree
- Disagree
- Neither agree nor disagree
- Agree
- Strongly agree

*28. I am good at sensing what others are feeling

- Strongly disagree
- Disagree
- Neither agree nor disagree
- Agree
- Strongly agree

*29. If I wanted, I could easily make someone to feel uneasy

- Strongly disagree
- Disagree
- Neither agree nor disagree
- Agree
- Strongly agree

*30. I find it difficult to explain my feelings to others even if I want to

- Strongly disagree
- Disagree
- Neither agree nor disagree
- Agree
- Strongly agree

*31. Most of the time, I understand why people feel the way they do

- Strongly disagree
- Disagree
- Neither agree nor disagree
- Agree
- Strongly agree

*32. Quite often I am not aware of people's emotional state

- Strongly disagree
- Disagree

- Neither agree nor disagree
- Agree
- Strongly agree

*33. I do not understand why the people around me respond the way they do

- Strongly disagree
- Disagree
- Neither agree nor disagree
- Agree
- Strongly agree

*34. Other people tend to confide in me about personal issues

- Strongly disagree
- Disagree
- Neither agree nor disagree
- Agree
- Strongly agree

*35. When I see someone who is stressed or anxious, I can easily calm them down

- Strongly disagree
- Disagree
- Neither agree nor disagree
- Agree
- Strongly agree

*36. If someone came to me in tears, I would not know what to do

- Strongly disagree
- Disagree
- Neither agree nor disagree
- Agree
- Strongly agree

PREV NEXT

About You

Please choose the best answer that describes you

*37. Gender

- Male
- Female

*38. Age Range

- 18-24
- 25-29
- 30-39
- 40-49
- 50-59
- 60 and more

*39. Educational Level

- Secondary level or lower
- University Undergraduate
- University Graduate
- University Post Graduate

*40. Education Field

- Business related studies
- Non-business related studies

*41. Professional Experience

- Not working
- Less than 2 years
- 2 to 5 years
- 5 to 10 years
- More than 10 years

*42. Personal Monthly Income

- 450$ or less
- 451$ - 800$
- 801$ - 1200$
- 1201$ - 1800$
- 1801$ and more

*43. Nationality

- Lebanese
- Non-Lebanese

PREV NEXT

Thank you for your time in filling this survey

PREV DONE

Appendix B

Revised FMBS

Please indicate how often you have engaged in the follow-
ing activities in the past six months:

1 = never, 2 = seldom, 3 = sometimes, 4 = often, 5 = always

Comparison shopped when purchasing a product or
service

Paid all your bills on time

Kept a written or electronic record of your monthly expenses

Stayed within your budget or spending plan

Paid off credit card balance in full each month

Maxed out the limit on one or more credit cards

Made only minimum payments on a loan

Began or maintained an emergency savings fund

Saved money from every paycheck

Saved for a long term goal such as a car, education, home, etc.

Contributed money to a retirement account

Bought bonds, stocks, or mutual funds

Please rate your behavior regarding insurance within the

past year on a scale of 1 – 5:

1 = Never, 2 = seldom, 3 = sometimes, 4 = often, 5 = always.

Maintained or purchased an adequate health insurance policy

Maintained or purchased adequate property insurance like auto or homeowners insurance

Maintained or purchased adequate life insurance

Appendix C

Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	80	42.8	42.8	42.8
	Female	107	57.2	57.2	100.0
	Total	187	100.0	100.0	

Age Range

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	18-24	17	9.1	9.1	9.1
	25-29	86	46.0	46.0	55.1
	30-39	54	28.9	28.9	84.0
	40-49	15	8.0	8.0	92.0
	50 or above	15	8.0	8.0	100.0
	Total	187	100.0	100.0	

Educational Level

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Secondary or lower	11	5.9	5.9	5.9
	Uni Undergrad	24	12.8	12.8	18.7
	Uni Grad	95	50.8	50.8	69.5
	Uni Postgrad	57	30.5	30.5	100.0

	Total	187	100.0	100.0	

Education Field

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Business related	100	53.5	53.5	53.5
	Non business related	87	46.5	46.5	100.0
	Total	187	100.0	100.0	

Years of Experience

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Less than 2 years	15	8.0	8.0	8.0
	2 to 5 years	60	32.1	32.1	40.1
	5 to 10 years	66	35.3	35.3	75.4
	more than 10 years	46	24.6	24.6	100.0
	Total	187	100.0	100.0	

Personal Monthly Income

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	800 or less	20	10.7	10.7	10.7
	801-1200	47	25.1	25.1	35.8
	1201-1800	58	31.0	31.0	66.8
	1801 and more	62	33.2	33.2	100.0

	Total	187	100.0	100.0	

Nationality

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Lebanese	179	95.7	95.7	95.7
	Non Lebanese	8	4.3	4.3	100.0
	Total	187	100.0	100.0	

FLSCORE

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00	21	11.2	11.2	11.2
	1.00	49	26.2	26.2	37.4
	2.00	71	38.0	38.0	75.4
	3.00	46	24.6	24.6	100.0
	Total	187	100.0	100.0	

Statistics

EImean

N	Valid	187
	Missing	0
Mean		3.4356
Median		3.4500
Mode		3.45
Range		2.15

Minimum	2.35
Maximum	4.50

Appendix D

Process Models 1, 4 and 74

```
Run MATRIX procedure:
*************** PROCESS Procedure for SPSS Version 3.3 *******************
        Written by Andrew F. Hayes, Ph.D.       www.afhayes.com
**************************************************************************
Model  : 4
  Y  : FBmean
  X  : FLSCORE
  M  : EImean
Sample
Size:  187
**************************************************************************
OUTCOME VARIABLE:
 EImean
Model Summary
       R      R-sq       MSE         F       df1       df2         p
    .2287     .0523     .1175   10.2074    1.0000   185.0000     .0016
Model
          coeff       se         t         p       LLCI      ULCI
constant   3.2870     .0528   62.2261     .0000    3.1828    3.3912
FLSCORE     .0844     .0264    3.1949     .0016     .0323     .1366
**************************************************************************
OUTCOME VARIABLE:
 FBmean
Model Summary
       R      R-sq       MSE         F       df1       df2         p
    .0762     .0058     .3745     .5370    2.0000   184.0000     .5854
Model
          coeff       se         t         p       LLCI      ULCI
constant   3.3931     .4417    7.6825     .0000    2.5217    4.2645
FLSCORE     .0469     .0485     .9671     .3348    -.0488     .1425
EImean     -.0766     .1313    -.5837     .5602    -.3356     .1824
****************** DIRECT AND INDIRECT EFFECTS OF X ON Y *****************
Direct effect of X on Y
    Effect       se         t         p       LLCI      ULCI
    .0469     .0485     .9671     .3348    -.0488     .1425
Indirect effect(s) of X on Y:
        Effect    BootSE   BootLLCI   BootULCI
EImean    -.0065     .0117    -.0313     .0160
*********************** ANALYSIS NOTES AND ERRORS ************************
Level of confidence for all confidence intervals in output:
 95.0000
Number of bootstrap samples for percentile bootstrap confidence intervals:
 5000
------ END MATRIX -----
```

```
Run MATRIX procedure:
*************** PROCESS Procedure for SPSS Version 3.3 *******************
          Written by Andrew F. Hayes, Ph.D.       www.afhayes.com
    Documentation available in Hayes (2018). www.guilford.com/p/hayes3
**************************************************************************
Model  : 4
    Y  : SavInv
    X  : FLSCORE
    M  : EImean
Sample
Size:  187
**************************************************************************
OUTCOME VARIABLE:
 EImean
Model Summary
          R       R-sq        MSE          F        df1        df2          p
      .2287      .0523      .1175    10.2074     1.0000   185.0000      .0016
Model
              coeff         se          t          p       LLCI       ULCI
constant     3.2870      .0528    62.2261      .0000     3.1828     3.3912
FLSCORE       .0844      .0264     3.1949      .0016      .0323      .1366
**************************************************************************
OUTCOME VARIABLE:
 SavInv
Model Summary
          R       R-sq        MSE          F        df1        df2          p
      .1180      .0139      .9090     1.2982     2.0000   184.0000      .2755
Model
              coeff         se          t          p       LLCI       ULCI
constant     2.9375      .6881     4.2689      .0000     1.5799     4.2951
FLSCORE       .1184      .0755     1.5682      .1185     -.0306      .2674
EImean       -.1471      .2045     -.7190      .4730     -.5505      .2564
****************** DIRECT AND INDIRECT EFFECTS OF X ON Y *****************
Direct effect of X on Y
     Effect         se          t          p       LLCI       ULCI
      .1184      .0755     1.5682      .1185     -.0306      .2674
Indirect effect(s) of X on Y:
           Effect     BootSE   BootLLCI   BootULCI
EImean     -.0124      .0189     -.0522      .0261
*********************** ANALYSIS NOTES AND ERRORS ************************
Level of confidence for all confidence intervals in output:
  95.0000
Number of bootstrap samples for percentile bootstrap confidence intervals:
  5000
------ END MATRIX -----
```

```
Run MATRIX procedure:
************* PROCESS Procedure for SPSS Release 2.16.3 *****************
          Written by Andrew F. Hayes, Ph.D.       www.afhayes.com
**************************************************************************
Model = 74
    Y = FBmean
    X = EImean
    M = FLSCORE
Sample size
        187
**************************************************************************
Outcome: FLSCORE
Model Summary
          R       R-sq        MSE          F        df1        df2          p
      .2287      .0523      .8615    10.2074     1.0000   185.0000      .0016
Model
              coeff         se          t          p       LLCI       ULCI
constant     -.3681      .6694     -.5500      .5830    -1.6887      .9524
EImean        .6193      .1938     3.1949      .0016      .2369     1.0017
**************************************************************************
Outcome: FBmean
Model Summary
          R       R-sq        MSE          F        df1        df2          p
      .1426      .0203      .3710     1.2662     3.0000   183.0000      .2874
Model
              coeff         se          t          p       LLCI       ULCI
constant     4.8673      .9969     4.8822      .0000     2.9003     6.8343
FLSCORE      -.7192      .4675    -1.5385      .1257    -1.6416      .2031
EImean       -.5150      .2964    -1.7374      .0840    -1.0999      .0699
int_1         .2254      .1368     1.6476      .1012     -.0445      .4954
Product terms key:
 int_1    FLSCORE     X     EImean
******************** DIRECT AND INDIRECT EFFECTS *************************
Conditional indirect effect(s) of X on Y at values of the moderator(s):
Mediator
            EImean     Effect    Boot SE   BootLLCI   BootULCI
FLSCORE     3.0844     -.0148      .0394     -.1005      .0612
FLSCORE     3.4356      .0342      .0322     -.0163      .1153
FLSCORE     3.7867      .0832      .0526      .0032      .2178
Values for quantitative moderators are the mean and plus/minus one SD from mean.
Values for dichotomous moderators are the two values of the moderator.
******************** INDEX OF MODERATED MEDIATION ************************
Mediator
             Index   SE(Boot)   BootLLCI   BootULCI
FLSCORE      .1396      .0954     -.0111      .3763
******************** ANALYSIS NOTES AND WARNINGS *************************
Number of bootstrap samples for bias corrected bootstrap confidence intervals:
     5000
Level of confidence for all confidence intervals in output:
    95.00
------ END MATRIX -----
```

```
Run MATRIX procedure:
***************** PROCESS Procedure for SPSS Version 3.2 *****************
          Written by Andrew F. Hayes, Ph.D.       www.afhayes.com
    Documentation available in Hayes (2018). www.guilford.com/p/hayes3
**************************************************************************
Model  : 1
    Y  : SavInv
    X  : FLSCORE
    W  : EImean
Sample
Size:  187
**************************************************************************
OUTCOME VARIABLE:
 SavInv
Model Summary
          R       R-sq        MSE          F        df1        df2          p
      .2139      .0457      .8844     2.9245     3.0000   183.0000      .0352
Model
              coeff         se          t          p       LLCI       ULCI
constant     6.3509     1.5392     4.1260      .0001     3.3140     9.3879
FLSCORE     -1.6554      .7218    -2.2935      .0230    -3.0794     -.2313
EImean      -1.1621      .4577    -2.5391      .0119    -2.0651     -.2591
Int_1         .5220      .2113     2.4708      .0144      .1052      .9388
Product terms key:
 Int_1    :        FLSCORE  x        EImean
Test(s) of highest order unconditional interaction(s):
       R2-chng          F        df1        df2          p
X*W      .0318     6.1049     1.0000   183.0000      .0144
----------
    Focal predict: FLSCORE  (X)
          Mod var: EImean   (W)
Conditional effects of the focal predictor at values of the moderator(s):
     EImean     Effect         se          t          p       LLCI       ULCI
     3.1000     -.0373      .0976     -.3821      .7028     -.2298      .1552
     3.4500      .1454      .0753     1.9313      .0550     -.0031      .2940
     3.7960      .3260      .1123     2.9035      .0041      .1045      .5475
********************** ANALYSIS NOTES AND ERRORS ************************
Level of confidence for all confidence intervals in output:
  95.0000
W values in conditional tables are the 16th, 50th, and 84th percentiles.
------ END MATRIX -----
```

Matrix

```
Run MATRIX procedure:
************* PROCESS Procedure for SPSS Release 2.16.3 *****************
          Written by Andrew F. Hayes, Ph.D.       www.afhayes.com
**************************************************************************
Model = 74
Y = SavInv
X = EImean
M = FLSCORE
Sample size 187


**************************************************************************
Outcome: FLSCORE

Model Summary
          R       R-sq        MSE          F        df1        df2          p
      .2287      .0523      .8615    10.2074     1.0000   185.0000      .0016

Model
              coeff         se          t          p       LLCI       ULCI
constant     -.3681      .6694     -.5500      .5830    -1.6887      .9524
EImean        .6193      .1938     3.1949      .0016      .2369     1.0017

**************************************************************************
Outcome: FBmean

Model Summary
          R       R-sq        MSE          F        df1        df2          p
      .1426      .0203      .3710     1.2662     3.0000   183.0000      .2874

Model
              coeff         se          t          p       LLCI       ULCI
constant     4.8673      .9969     4.8822      .0000     2.9003     6.8343
FLSCORE      -.7192      .4675    -1.5385      .1257    -1.6416      .2031
EImean       -.5150      .2964    -1.7374      .0840    -1.0999      .0699
int_1         .2254      .1368     1.6476      .1012     -.0445      .4954

Product terms key:

 int_1    FLSCORE     X     EImean

******************** DIRECT AND INDIRECT EFFECTS *************************

Conditional indirect effect(s) of X on Y at values of the moderator(s):
```

```
Mediator
            EImean      Effect    Boot SE   BootLLCI   BootULCI
FLSCORE     3.0844     -.0148      .0394     -.1005      .0612
FLSCORE     3.4356      .0342      .0322     -.0163      .1153
FLSCORE     3.7867      .0832      .0526      .0032      .2178



Values for quantitative moderators are the mean and plus/minus one SD from me
an.
Values for dichotomous moderators are the two values of the moderator.

********************* INDEX OF MODERATED MEDIATION ************************

Mediator
            Index    SE(Boot)    BootLLCI    BootULCI
FLSCORE      .1396       .0954      -.0111       .3763

********************* ANALYSIS NOTES AND WARNINGS *************************

Number of bootstrap samples for bias corrected bootstrap confidence intervals:
     5000

Level of confidence for all confidence intervals in output:
    95.00

------ END MATRIX -----
```

Appendix E
ANOVA and t-Tests

ANOVA

ANOVA FB,FL & EI with Gender

		Sum of Squares	df	Mean Square	F	Sig.
FBmean	Between Groups	1.904	1	1.904	5.226	.023
	Within Groups	67.402	185	.364		
	Total	69.306	186			
FLSCORE	Between Groups	.231	1	.231	.254	.615
	Within Groups	167.940	185	.908		
	Total	168.171	186			
EImean	Between Groups	.004	1	.004	.029	.865
	Within Groups	22.927	185	.124		
	Total	22.931	186			

Descriptives

Descriptives of ANOVA FB,FL & EI with Gender

		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
FBmean	Male	80	3.3291	.59081	.06605	3.1976	3.4605	1.70	4.60
	Female	107	3.1251	.61296	.05926	3.0076	3.2426	1.82	4.75
	Total	187	3.2124	.61042	.04464	3.1243	3.3004	1.70	4.75
FLSCORE	Male	80	1.8000	.97305	.10879	1.5835	2.0165	.00	3.00
	Female	107	1.7290	.93738	.09062	1.5493	1.9086	.00	3.00
	Total	187	1.7594	.95087	.06953	1.6222	1.8965	.00	3.00

	Male	80	3.4406	.36223	.04050	3.3600	3.5212	2.35	4.50
EImean	Female	107	3.4318	.34425	.03328	3.3658	3.4978	2.60	4.25
	Total	187	3.4356	.35112	.02568	3.3849	3.4862	2.35	4.50

ANOVA

Table 14: ANOVA FB,FL & EI with Age

		Sum of Squares	df	Mean Square	F	Sig.
FLSCORE	Between Groups	2.015	4	.504	.552	.698
	Within Groups	166.156	182	.913		
	Total	168.171	186			
FBmean	Between Groups	.837	4	.209	.556	.695
	Within Groups	68.469	182	.376		
	Total	69.306	186			
EImean	Between Groups	.230	4	.057	.461	.764
	Within Groups	22.701	182	.125		
	Total	22.931	186			

ANOVA

ANOVA of FB,FL & EI with Education Level

		Sum of Squares	df	Mean Square	F	Sig.
FLSCORE	Between Groups	3.910	3	1.303	1.452	.229
	Within Groups	164.261	183	.898		
	Total	168.171	186			

FBmean	Between Groups	.487	3	.162	.431	.731
	Within Groups	68.819	183	.376		
	Total	69.306	186			
EImean	Between Groups	1.117	3	.372	3.124	.027
	Within Groups	21.814	183	.119		
	Total	22.931	186			

Descriptives

Descriptives of ANOVA FB,FL & EI with Education Level

		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
FLSCORE	Secondary or lower	11	1.1818	.75076	.22636	.6775	1.6862	.00	2.00
	Uni Undergrad	24	1.7917	.97709	.19945	1.3791	2.2043	.00	3.00
	Uni Grad	95	1.7895	.92132	.09453	1.6018	1.9772	.00	3.00
	Uni Postgrad	57	1.8070	1.00780	.13349	1.5396	2.0744	.00	3.00
	Total	187	1.7594	.95087	.06953	1.6222	1.8965	.00	3.00
FBmean	Secondary or lower	11	3.0333	.51774	.15610	2.6855	3.3812	2.17	4.00
	Uni Undergrad	24	3.1600	.68227	.13927	2.8719	3.4481	1.90	4.75
	Uni Grad	95	3.2331	.59000	.06053	3.1129	3.3533	1.90	4.60
	Uni Postgrad	57	3.2344	.63683	.08435	3.0654	3.4033	1.70	4.60
	Total	187	3.2124	.61042	.04464	3.1243	3.3004	1.70	4.75
EImean	Secondary or lower	11	3.1364	.46103	.13900	2.8266	3.4461	2.35	3.95
	Uni Undergrad	24	3.4250	.39176	.07997	3.2596	3.5904	2.75	4.30

Uni Grad	95	3.4453	.32933	.03379	3.3782	3.5124	2.60	4.50
Uni Postgrad	57	3.4816	.32632	.04322	3.3950	3.5682	2.95	4.15
Total	187	3.4356	.35112	.02568	3.3849	3.4862	2.35	4.50

Multiple Comparisons

Post Hoc Test for ANOVA FB,FL & EI with Education Level

LSD

Dependent Variable	(I) Educational Level	(J) Educational Level	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
FLSCORE	Secondary or lower	Uni Undergrad	-.60985	.34496	.079	-1.2905	.0708
		Uni Grad	-.60766*	.30174	.045	-1.2030	-.0123
		Uni Postgrad	-.62520*	.31201	.047	-1.2408	-.0096
	Uni Undergrad	Secondary or lower	.60985	.34496	.079	-.0708	1.2905
		Uni Grad	.00219	.21645	.992	-.4249	.4292
		Uni Postgrad	-.01535	.23054	.947	-.4702	.4395
	Uni Grad	Secondary or lower	.60766*	.30174	.045	.0123	1.2030
		Uni Undergrad	-.00219	.21645	.992	-.4292	.4249
		Uni Postgrad	-.01754	.15873	.912	-.3307	.2956
	Uni Postgrad	Secondary or lower	.62520*	.31201	.047	.0096	1.2408
		Uni Undergrad	.01535	.23054	.947	-.4395	.4702
		Uni Grad	.01754	.15873	.912	-.2956	.3307
FBmean	Secondary or lower	Uni Undergrad	-.12670	.22329	.571	-.5673	.3138
		Uni Grad	-.19976	.19531	.308	-.5851	.1856
		Uni Postgrad	-.20104	.20195	.321	-.5995	.1974
	Uni Undergrad	Secondary or lower	.12670	.22329	.571	-.3138	.5673

		Uni Grad	-.07306	.14010	.603	-.3495	.2034
		Uni Postgrad	-.07433	.14922	.619	-.3687	.2201
		Secondary or lower	.19976	.19531	.308	-.1856	.5851
	Uni Grad	Uni Undergrad	.07306	.14010	.603	-.2034	.3495
		Uni Postgrad	-.00128	.10274	.990	-.2040	.2014
		Secondary or lower	.20104	.20195	.321	-.1974	.5995
	Uni Postgrad	Uni Undergrad	.07433	.14922	.619	-.2201	.3687
		Uni Grad	.00128	.10274	.990	-.2014	.2040
		Uni Undergrad	-.28864*	.12571	.023	-.5367	-.0406
	Secondary or lower	Uni Grad	-.30890*	.10996	.006	-.5259	-.0919
		Uni Postgrad	-.34522*	.11370	.003	-.5695	-.1209
		Secondary or lower	.28864*	.12571	.023	.0406	.5367
	Uni Undergrad	Uni Grad	-.02026	.07888	.798	-.1759	.1354
		Uni Postgrad	-.05658	.08401	.502	-.2223	.1092
EImean		Secondary or lower	.30890*	.10996	.006	.0919	.5259
	Uni Grad	Uni Undergrad	.02026	.07888	.798	-.1354	.1759
		Uni Postgrad	-.03632	.05784	.531	-.1504	.0778
		Secondary or lower	.34522*	.11370	.003	.1209	.5695
	Uni Postgrad	Uni Undergrad	.05658	.08401	.502	-.1092	.2223
		Uni Grad	.03632	.05784	.531	-.0778	.1504

Independent Samples Test

Independent t-Test FB,FL & EI with Education Field

	Levene's Test for Equality of Variances	t-test for Equality of Means

		F	Sig.	t	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
FLSCORE	Equal variances assumed	3.578	.060	4.732	185	.000	.62471	.13202	.36425	.88517
	Equal variances not assumed			4.708	176.952	.000	.62471	.13270	.36283	.88660
FBmean	Equal variances assumed	.871	.352	1.274	185	.204	.11381	.08934	-.06246	.29007
	Equal variances not assumed			1.278	183.412	.203	.11381	.08905	-.06189	.28950
EImean	Equal variances assumed	.106	.745	.122	185	.903	.00632	.05161	-.09551	.10814
	Equal variances not assumed			.123	184.928	.902	.00632	.05118	-.09466	.10730

Group Statistics

Group Statistics for Independent t-Test FB,FL, EI with Education Field

	Education Field	N	Mean	Std. Deviation	Std. Error Mean
FLSCORE	Business related	100	2.0500	.86894	.08689
	Non business related	87	1.4253	.93550	.10030
FBmean	Business related	100	3.2653	.62254	.06225
	Non business related	87	3.1515	.59391	.06367
EImean	Business related	100	3.4385	.37097	.03710
	Non business related	87	3.4322	.32893	.03527

ANOVA

FB,FL & EI with Years of Experience

		Sum of Squares	df	Mean Square	F	Sig.
FLSCORE	Between Groups	1.452	3	.484	.531	.661
	Within Groups	166.719	183	.911		
	Total	168.171	186			
FBmean	Between Groups	.185	3	.062	.163	.921
	Within Groups	69.121	183	.378		
	Total	69.306	186			
EImean	Between Groups	.110	3	.037	.293	.830
	Within Groups	22.821	183	.125		
	Total	22.931	186			

ANOVA

FB,FL & EI with Personal Monthly Income

		Sum of Squares	df	Mean Square	F	Sig.
FLSCORE	Between Groups	4.837	3	1.612	1.807	.148
	Within Groups	163.334	183	.893		
	Total	168.171	186			
FBmean	Between Groups	1.177	3	.392	1.054	.370
	Within Groups	68.129	183	.372		
	Total	69.306	186			
EImean	Between Groups	1.013	3	.338	2.818	.040

	Within Groups	21.918	183	.120		
	Total	22.931	186			

Multiple Comparisons

Post Hoc Test for ANOVA FB,FL & EI with Personal Monthly Income

LSD

Dependent Variable	(I) Personal Monthly Income	(J) Personal Monthly Income	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
FLSCORE	451-800	801-1200	-.33085	.25222	.191	-.8285	.1668
		1201-1800	-.49483*	.24498	.045	-.9782	-.0115
		1801 and more	-.52097*	.24295	.033	-1.0003	-.0416
	801-1200	451-800	.33085	.25222	.191	-.1668	.8285
		1201-1800	-.16398	.18541	.378	-.5298	.2018
		1801 and more	-.19012	.18272	.299	-.5506	.1704
	1201-1800	451-800	.49483*	.24498	.045	.0115	.9782
		801-1200	.16398	.18541	.378	-.2018	.5298
		1801 and more	-.02614	.17258	.880	-.3666	.3144
	1801 and more	451-800	.52097*	.24295	.033	.0416	1.0003
		801-1200	.19012	.18272	.299	-.1704	.5506
		1201-1800	.02614	.17258	.880	-.3144	.3666
FBmean	451-800	801-1200	-.13497	.16290	.408	-.4564	.1864
		1201-1800	-.07191	.15822	.650	-.3841	.2403
		1801 and more	-.23190	.15690	.141	-.5415	.0777

		451-800	.13497	.16290	.408	-.1864	.4564
	801-1200	1201-1800	.06307	.11975	.599	-.1732	.2993
		1801 and more	-.09693	.11801	.413	-.3298	.1359
		451-800	.07191	.15822	.650	-.2403	.3841
	1201-1800	801-1200	-.06307	.11975	.599	-.2993	.1732
		1801 and more	-.15999	.11146	.153	-.3799	.0599
		451-800	.23190	.15690	.141	-.0777	.5415
	1801 and more	801-1200	.09693	.11801	.413	-.1359	.3298
		1201-1800	.15999	.11146	.153	-.0599	.3799
		801-1200	-.16388	.09240	.078	-.3462	.0184
	451-800	1201-1800	-.08853	.08974	.325	-.2656	.0885
		1801 and more	-.22444*	.08900	.013	-.4000	-.0488
		451-800	.16388	.09240	.078	-.0184	.3462
	801-1200	1201-1800	.07535	.06792	.269	-.0587	.2094
		1801 and more	-.06055	.06693	.367	-.1926	.0715
EImean		451-800	.08853	.08974	.325	-.0885	.2656
	1201-1800	801-1200	-.07535	.06792	.269	-.2094	.0587
		1801 and more	-.13590*	.06322	.033	-.2606	-.0112
		451-800	.22444*	.08900	.013	.0488	.4000
	1801 and more	801-1200	.06055	.06693	.367	-.0715	.1926
		1201-1800	.13590*	.06322	.033	.0112	.2606

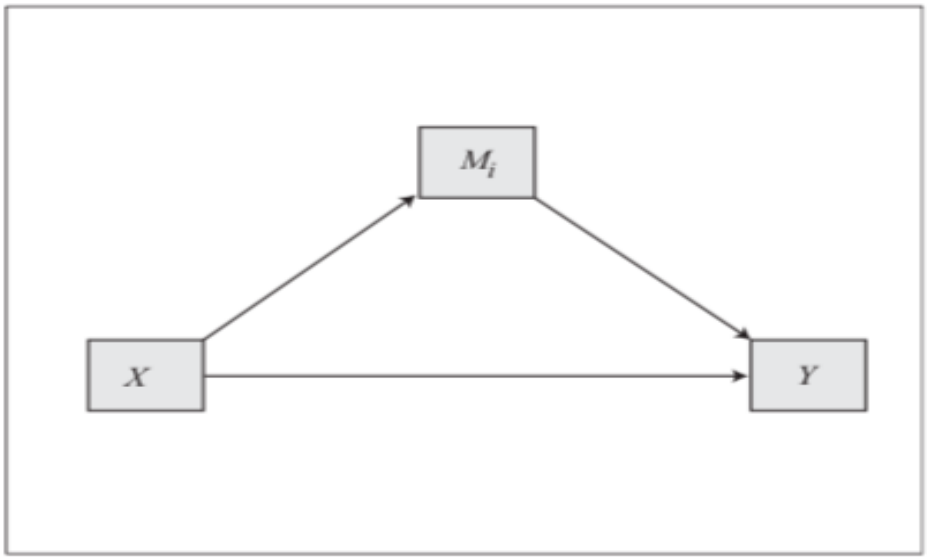
*. The mean difference is significant at the 0.05 level.

Appendix F

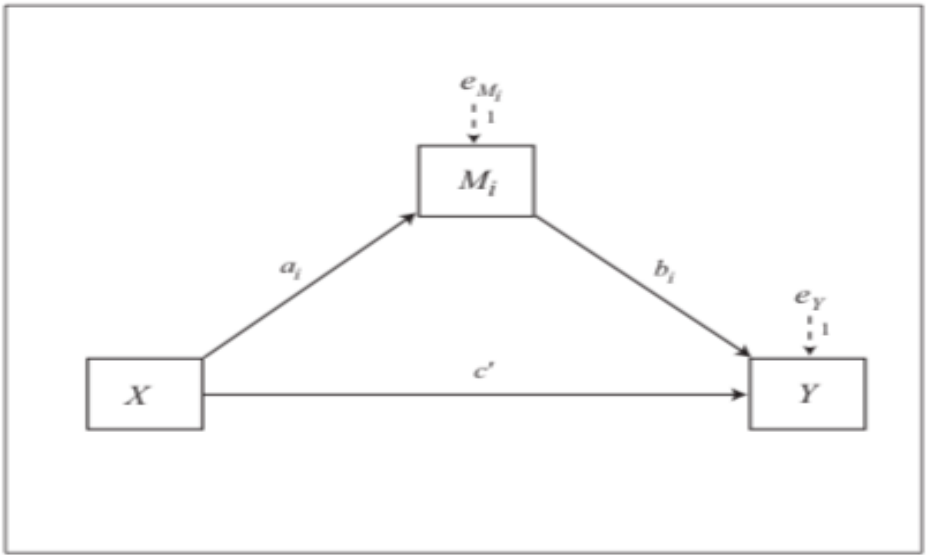
Process Model 4

Model 4

Conceptual Diagram



Statistical Diagram



Indirect effect of X on Y through $M_i = a_i\, b_i$

Direct effect of X on $Y = c'$

*Model 4 allows up to 10 mediators operating in parallel

This page is kept blank on purpose.