

## The Relationships Among Love of Money, Machiavellianism and Unethical Behavior

Işıl Mendeş Pekdemir<sup>[a]</sup>; Aygül Turan<sup>[b]</sup>\*

<sup>[a]</sup>Istanbul University, Faculty of Business Administration, Department of Management and Organization, Turkey.

<sup>[b]</sup>Yıldız Technical University, Economic and Administrative Programme, Turkey.

\*Corresponding author

Received 4 March 2015; accepted 2 May 2015

Published online 26 June 2015

### Abstract

An emerging stream of work on money can be found in the management and organizational behavior literature; however, individuals' attitude toward money (whether loving or hating it) is a relatively new concept to wait to be explored by scholars. Generally, growing body of literature has to researches investigating the positive side of money. Nevertheless, in this study we aim to explain not only positive, but also negative side of money differentiating individuals very much and very little fond of money and investigate the relationship between love of money, machiavellian personality and unethical behavior of individuals. Focusing individuals' passion for money or wealth, we also purpose to illuminate the issue whether individual groups being very much and very little fond of money represent different level of machiavellian personality and unethical behavior. In addition, we investigate how differentiates unethical behavior in terms of individual's machiavellianism level. Demographic variables are also within the scope of this research, so individuals' attitudes toward money, machiavellian personality and unethical behavior are explained in terms of demographic characteristics. Therefore, we gathered data from 360 MBA students and conducted hierarchical regression as well as ordinal logistic regression analyses in order to verify our hypotheses. Results indicated that machiavellianism was partially mediated the relationship between love of money and unethical behavior. Implication showed that individuals being very much fond of money were 5,87 times likely to represent upper level machiavellian personality than individuals being very little

fond of money. Furthermore, individuals being very much fond of money were 3.58 times likely to exhibit upper level unethical behavior than individuals being very little fond of money. Higher degree machiavellian individuals 2.28 times likely to exhibit upper level unethical behavior than lower degree machiavellian individuals. Moreover, the evidence from the research represents that individuals not receiving ethics lesson were 2.05 times likely to exhibit upper level machiavellian personality than individuals receiving ethics lesson. Also, it can be comment males are 2.38 times likely to represent upper level unethical behavior than females.

**Key words:** Love of money; Machiavellianism; Unethical behavior; Hierarchical regression; Ordinal logistic regression

Pekdemir, I. M., & Turan, A. (2015). The Relationships Among Love of Money, Machiavellianism and Unethical Behavior. *Canadian Social Science*, 11(6), 48-59. Available from: <http://www.cscanada.net/index.php/css/article/view/7112> DOI: <http://dx.doi.org/10.3968/7112>

### INTRODUCTION

Scandals and corruptions in remarkable large scale corporations have been witnessed from all over the world (Etzioni, 2002; Feiner, 2004). These scandals explain how leaders behave in order to maximize their profits, maintain their position, manipulate others for their own interest, conduct opportunistic behavior in the cooperation, disregard traditional moral standards etc. (Giacalone, 2004; Sakalaki et al., 2007; Christie and Geis, 1970; Wilson et al., 1996). Those attributes define a construct as machiavellianism mentioned first in the 16<sup>th</sup> century by Machiavelli in the literature. Machiavellianism as one of the dark triad was investigated in the psychology literature in 1970s. On the other hand, machiavellianism was investigated the single construct in the organizational behavior literature in 1980s.

The main cause of these scandals has been “*the overemphasis American corporations have been forced to give in recent years to maximizing shareholder value without regard for the effect of their actions on other stakeholders*” (Kochan, 2002, p.139). Following the description, it is convenient to mention about individuals’ temptation for money. Some researchers define love of money as “evil” in order to stress individuals’ temptation to do everything whether ethical or unethical (Tang & Chiu, 2003; Tang & Chen, 2008; Tang et al., 2006). Considering high machiavellian personality people are very fond of money (Mitchell and Mickel, 1999; Tang & Chiu, 2003) and incline to behave unethically (Mudrack, 1993; Den Hartog & Belschak, 2012; Zagenczyk et al., 2014; Egan et al., 2015), we purpose to investigate relationship between love of money, machiavellianism and unethical behavior of individuals.

## 1. THEORY AND HYPOTHESES DEVELOPMENT

### 1.1 Love of Money

Individuals’ attitude towards money or wealth is an issue that has been evaluated since almost human being. Now that people have passion for money or wealth (Tang & Chiu, 2003, p.16). In addition, meaning of money for individuals is investigated in different fields, especially economics, sociology and psychology. Examining the concept from an economic perspective, money is an object which employees are attained it in exchange for working. On the other hand, money offers an emotional and meaningful explanation for psychological and sociological issues (Mitchell & Mickel, 1999, p.569). Parallel with those clarifications, in management literature, money is mostly researched on the basis of employees’ motivation and satisfaction (Tang & Chen, 2008, p.5; Mitchell & Mickel, 1999, p.570). A growing body of researcher defines money as a motivation factor (Podusca 1992; Gupta and Shaw, 1998; Kohn, 1993; Lawler, 1971; Turan, 2014) entitled in extrinsic motivation while Herzberg (1987) identifies it as a hygiene factor. On the other hand, a few researches in the management literature explore the concept of money from the individual-differences perspective (Mitchell & Mickel, 1999, p.571). Almost all claim about what money means is differentiated an individual from another. “*The role of individual differences and personality traits is clearly important in the study of money attitudes and behavior.*” (Furnham & Argyle, 1998, p.29)

Money attitudes and behaviors are explained on the basis of feeling of individuals towards money that is a motivator as well as success, importance and wealth symbols. Growing body of individuals thought that money is a motivation tool and money symbolizes the success and money is important to be rich (Tang & Chiu, 2003, p.16). Besides the affirmative sides of money, negative

sides should be denoted. In view of being a tool to be encouraged people to conduct improper way, money is evaluated “evil” by some researchers (Wright et al., 2001; Tang, 1995; Belk & Wallendorf, 1990).

Love of money constructs used in the literature to explain some other constructs (such as machiavellianism, income, propensity to unethical behavior, pay satisfaction). It is possible to find many researches illustrating love of money explains machiavellianism personality (Harrel & Hartnagel, 1976; Tang & Chen, 2008; Tang et al., 2008; Sardzoska & Tang, 2012). One of the researches indicates that love of money has a direct and significant relationship with machiavellianism (Tang & Chen, 2008). Especially, *‘though to be rich easily and quickly’* lured individuals into representing machiavellian personality (Giacalone, 2004, p.417). In addition, there is growing body of researches indicating love of money affects individuals’ behavior whether ethical or not (Tang & Chiu, 2003; Tang & Chen, 2008; Tang et al., 2006; Tang et al., 2008). A research investigating the relationship of the two constructions claims that individuals keen on materialistic values could develop manipulative strategy and engage in unethical behavior (Tang & Chen, 2008). In addition, machiavellianism and unethical behavior relation were investigated a great deal of researches (Mudrack, 1993; Den Hartog & Belschak, 2012; Zagenczyk et al., 2014; Egan et al., 2015). Other researches show love of money was not only direct relationship with unethical behavior (Vitell et al, 2006), but also indirect relationship with unethical behavior through pay satisfaction (Tang & Chiu, 2003) as well as machiavellianism (Tang & Chen, 2008). Following the previous research, we propose the following hypothesis:

**Hypothesis 1:** Machiavellianism mediates the relation between love of money and unethical behavior.

### 1.2 Machiavellianism

The Prince was written by Machiavelli to advise individuals getting and controlling power in 1513 (Machiavelli, 2014). Generally, Machiavelli claimed that rulers not representing ethical behaviors are more successful than those who are honesty and fair towards people. Following this proposition, Christie and Geis (1970) was the first psychologist to investigate machiavellianism and defined it as “*machiavellianism is based entirely on expediency, manipulation, exploitation and deviousness and is devoid of the traditional virtues of trust, honor and decency.*” Moreover, Fraedrich et. al. (1989) entitled type of machiavellianism behavior as “amoral”. Machiavellianism is defined on the basis of three different dimensions by Christie and Geis (1970), endorsement of deception and manipulation, cynical perspective on human nature and a disregard for conventional morality. After that, Dahling et al. (2009) identified machiavellianism with four dimension distrust of others, desire for status, desire for control and amoral manipulation.

Machiavellianism has mostly been investigated as experimental researches and conducted in small groups. Machiavellianism researches have indicated that high mach people have offensive and dishonest manner to accomplish their goal, they manipulate others to perform better and they convince others but not have been convinced by others (Christie & Geis, 1970; Zagenczyk et al., 2014; Zin et al., 2011). In addition, a high mach person tends to violate others' rights for their personal interest (Zagenczyk et al., 2014).

Emerging stream of work on machiavellianism investigates the differences between high Mach and low Mach individuals (Mc Hoskey, 1999; Wiggins & Broughton, 1985). Results of another research conducted on MBA students, faculty colleagues and managers indicate that faculty colleagues is the most machiavellian, following it MBA students and the least machiavellian is managers in this group (Siegel, 1973). Considering leaders deceptively manipulate accounting procedures so that they could enhance their bonus, it could be claimed that "*high love-of-money executives may have a manipulative and win-at-all-cost disposition*" (Christie & Geis, 1970). Following those descriptions and considering high machiavellian personality people are very fond of money (Mitchell & Mickel, 1999; Tang & Chiu, 2003), we propose the following hypothesis:

**Hypothesis 2:** Individuals being very fond of money represent higher level machiavellian personality than individuals being little fond of money.

### 1.3 Unethical Work Behavior

Unethical work behavior is investigating in different fields, such as business ethics, organizational psychology and criminology. Because unethical work behavior comprises of a large variety of behaviors ranging from small transgression (having long breaks, absenteeism, rumor etc) to criminal behavior (robbery, corruption, defraud etc) (Wouters et al., 2014; Langevin & Mendoza, 2013; Ochulor, 2011). Unethical behavior is defined as "*every action by public servants that defines and violates (a) shared organizational norms and expectations and/or (b) core societal values, mores and standards of proper conduct*" by Vardi and Wiener (1996).

Several authors identify unethical behavior with different dimensions. For example, Moore et al. (2012) was defined the concept with eight dimensions entitled moral justification, euphemistic labelling, advantageous comparison, displacement of responsibility, diffusion of responsibility, distortion of consequences, dehumanization and attribution of blame. On the other hand, Chen and Tang (2006) define it with five dimensions as abuse resources, not whistle blowing, theft, corruption and deception. Also there can be found researches explaining unethical behavior in a single dimension in the literature (Victor & Cullen, 1988; Agarwal & Malloy, 1999; Tang & Chiu, 2003; Wouters et al., 2014).

Unethical behavior has been witnessed as scandals of some corporation since years of 2000. Following this kind of unethical behaviors, society blames for management educators burdened with big responsibility for management education (Giacalone, 2004). Giacalone (2004), is one of researchers to investigate whether business education adopted materialism students, claims that the educational content encourages them to execute manipulative strategies and engage in unethical behavior. In addition, he alleges in spite of the fact that pursuit of wealth has a positive outcome for social status of individuals, materialistic values have a negative impact on their lives. Researches indicate that there is a significant relationship between venerated materialistic values and lower personal well-being (low level happiness, life satisfaction and self-actualization) (Ahuvia & Wong, 1995; Mick, 1996) as well as problems with mental and physical health (Cohen & Cohen, 1996; Kasser & Ryan, 1993, 1996, 2001; Williams et al., 2000). Furthermore, Giacalone (2004) has emphasized that high-love-of money individuals have venerated materialistic values; therefore, they desire to get rich rapidly in an easy way. On the basis of Giacalone's research, Tang and Chiu (2003), Tang and Chen (2008), Tang et al. (2006) verify his results defining love of money as "evil" and illustrating the relationship between love of money and unethical behavior significant relationship. Taking the large body of research into consideration, we aim to investigate unethical behavior differences between individuals being very and little fond of money, so we propose the following hypothesis:

**Hypothesis 3:** Individuals being very fond of money represent higher level unethical behavior than individuals being little fond of money.

Many researches about machiavellianism discriminate between high mach and low mach individuals and focus on high mach individual's attitudes and behaviors (Mc Hoskey, 1999; Wiggins and Broughton, 1985; Fehr et al., 1992; Mudrack, 1990). One of the experimental researches found no performance differences between low and high machiavellian leaders. However, high mach leaders give more order and less involvement to decrease the tension (Drory & Gluskinos, 1980). Machiavellianism is used to explain unethical behavior in the literature and many of these researches focus on high machiavellian personality of individuals (Mudrack, 1990; Winter et al., 2004; Zagenczyk et al., 2014). Following the previous research, we propose the following hypothesis:

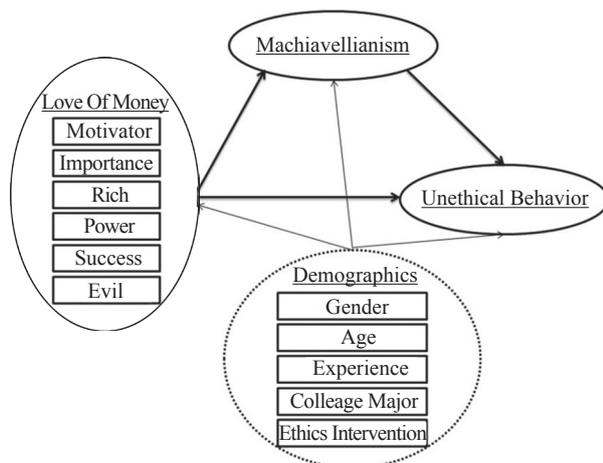
**Hypothesis 4:** Higher degree machiavellian individuals exhibit upper level unethical behavior than lower degree of machiavellian individuals.

In addition to the relation among love of money, machiavellianism and unethical behavior, there can be found many researches in the literature investigating those construct in terms of demographic properties of individuals. For example, Christie and Geis (1970) found men's machiavellian personality higher than women's and this result was confirmed by Webster and Harmon's (2002) study. On the contrary, Rayburn and Rayburn

(1996) found vice versa. “Male students have higher concerns about career advancement and are at least twice as likely to engage in unfair practices as their female counterparts” (Betz et al., 1989; Malinowski & Berger, 1996). Verifying the result, Hoffman (1998), Deshpande (1997), Beu et al. (2003) claimed male managers were less ethical than female ones. Female students were influence ethics education, yet no influence in male counterparts (Ritter, 2006). In addition, Allmon et al.’s (2000) research results indicates ethical beliefs rise with age both females and males. Furthermore, male students major in business represented more unethical behavior than those who are a psychology major (Tang & Chen, 2008). One of the researches conducted by Tang et al. (2006) indicated that African-American women are more obsessed with money than Caucasian women. Following these results indicating previous research, we aim to investigate love of money, machiavellianism and unethical behavior according to demographic features of an individual. So we propose the following hypothesis:

**Hypothesis 5:** Individuals’ age, gender, work experience, college major and whether they received an ethical intervention during their university education related to a) love of money, b) machiavellianism and c) unethical behavior level that they represent.

According to hypotheses that were put forward, we depicted the research model as in Figure 1. As indicated Figure 1. We aim to investigate the mediating role of machiavellianism on the relationship between love of money and unethical behavior. Taking individuals passion for wealth into consideration, individuals very much fond of money are differentiated from individuals very little fond of money to show their level of machiavellian personality and unethical behavior. In addition, we purpose to discriminate individuals on the basis of high, medium and low machiavellian personality and to explore their unethical behavior level. Furthermore, demographic variables were added in the model to explore their effects on love of money, machiavellianism and unethical behavior construct separately.



**Figure 1**  
**Research Model**

## 2. METHOD

### 2.1 Participants and Procedures

After reviewing the literature, we came across the researches investigating the relationship among love of money, machiavellianism and unethical behavior researches sampling presidents (Deluga, 2001; House et al., 1991), managers (House et al., 1991; Siegel, 1973; Drory & Gluskinos, 1980), business, law and psychology students or undergraduates (McCabe et al., 1991; Chen & Tang, 2006; Tang & Chen, 2008), white collar employees, R&D employees (Winter et al., 2004), MBA students and faculty colleagues (Siegel, 1973; Tang & Chiu, 2003) in the literature.

Taking the previous researches into account, we sampled the MBA students having different educational and professional background and different level of experience about their work. Distributing the questionnaire 906 MBA students in a public university located in Istanbul, we attained 360 suitable forms to be able to include data analysis process. Then reliability and construct validity as well as hierarchical regression analyses were conducted by means of all data. However, ordinal regression analyses, which were discriminating sample according to some criteria, were done a specific group of individuals in the sample.

### 2.2 Measurement Instrument

In order to execute this research, we applied a questionnaire containing love of money, machiavellianism and unethical behavior scales using 5-point-likert type scale as well as six open ended questions having been queried to attain some demographic information about the respondents (gender, age, work experience, profession, ethics intervention).

#### 2.2.1 Love of Money

*Love of money* was measured by adopting money belief and behavior scale (Furnham, 1984), money ethic scale (Tang, 1995) and money importance scale (Mitchell & Mickel, 1999; Mitchell et al., 1998) in this study. Scale of present research contained 6 factors -entitled motivator, importance, rich, power, success, evil- and 24 items in anchored at 1 = strongly disagree and 5 = strongly agree.

First, item total correlation analysis was done for love of money scale and there could not be found on any item whose item-total correlation coefficient under 0.20, so there was no need to drop any item. Then explanatory factor analyses were conducted. Love of money scale consists of 24 items and we expected it should divide in six factors as in the literature. However, factor analyses results indicated that love of money divided into 5 factors. Especially, power and success factors gather in a single factor and it was entitled “power and success”. For, three items violated the structure of factor, they were dropped. In addition, one item of motivator factor had close factor loadings in two separate factors then it was

dropped. Finally remaining 20 items settled in love of money scales' relevant factors with 70.933 % variances

explained, and Cronbach alpha value is 0.909. Reliability and construct validity results were illustrated in Table 1.

**Table 1**  
**Reliability and Factor Analyses Results**

Variables	Factor loadings	Mean	Variance explain(%)	Cronbach Alpha ( $\alpha$ )	Source
LOVE OF MONEY		3.1222	70.933	0.909	
Factor 1: Motivator (4 items)		3.2322			
15. Money reinforces me to work harder.	.858				
14. I am motivated to work hard for money.	.853				
16. I am highly motivated by money.	.843				
17. Money is a motivator.	.777				
Factor 2: Importance (5 items)		3.8492			
3. Money is good.	.774				
5. Money is attractive.	.773				
4. Money is an important factor in the lives of all of us.	.770				
1. Money is important.	.668				
2. Money is valuable.	.641				
Factor 3: Rich (4 items)		3.5405			Tang and Chiu (2003); Mitchell and Mickel (1999)
20. It would be nice to be rich.	.850				
21. I want to be rich.	.844				
19. Having a lot of money (being rich) is good.	.787				
22. My life will be more enjoyable, if I am rich and have more money.	.649				
Factor 4: Power and success (4 items)		2.2523			
11. I use money to influence others.	.821				
12. I talk frequently about how much money I have.	.706				
10. Money is how we compare each other.	.631				
6. I firmly believe that money can solve all of my problems.	.610				
13. Money makes people respect you in the community.	.541				
Factor 5: Evil (2 items)		2.8778			
24. Money is evil.	.861				
23. Money is the root of evil.	.719				
MACHIAVELLIANISM (7 Items)		2.8214	48.347	0.5942	
4. The best way to handle people is to tell them what they want to hear.	.666				
6. I am willing to sabotage the efforts of other people if they threaten my own goals.	.652				Valentine and Fleischman (2003); Dahling et. al. (2009)
7. The only good reason to talk to others is to get information that I can use to my benefit.	.630				
1. Never tell anyone the real reason you did something unless it is useful to do so.	.629				
8. If I show any weakness at work, other people will take advantage of it.	.606				
2. It is wise to flatter important people.	.595				
3. It is hard to get ahead without cutting corners here and there.	.575				
UNETHICAL BEHAVIOR (7 Items)		1.9791	55.814	0.859	
4. I violate laws, rules or procedures to help a friend.	.858				
5. I violate laws, rules or procedures to protect colleagues from the same team or group.	.818				
3. I violate laws, rules or procedures to protect your own interest.	.795				
6. I violate laws, rules or procedures to help a citizen in the course of your occupation.	.784				Wouters et. al. (2014)
2. I ignore important goals to work efficiently.	.769				
1. I violate laws, rules or procedures because you do not agree with them by your own personal beliefs.	.713				
7. I hide unethical issues from people outside the organization to protect the image of the organization.	.396				

On logistic regression analyses in the present research, we used Drory and Glukinos (1980) methodology. So we allocated those three groups below 25%, from 25% to 75% and above 75% of total love of money score, as “very little fond of money”, “medium fond of money” and “very much fond of money” respectively. Love of money was measured 20 items and total scores changes from 20 to 100 in this study, so we entitled 40 and below scores as “very little fond of money” and 80 and above scores as “very much fond of money”.

### 2.2.2 Machiavellianism

*Machiavellianism* was measured with 8 items, adopting three machiavellianism personality scales in the literature. One of them was Dahling et al.’s (2009) scale comprising 16 items and 4 dimensions. The other one was Valentine and Fleischman’s (2003) 5-item-scale, a reduced version of Christie and Geis’s (1970) machiavellian personality scale which were the first scale of measuring machiavellianism construct referred Machiavelli in Prince before. 8 items were queried 5 points rated scale, from 1 = strongly disagree to 5 = strongly agree.

Item-total correlation analysis indicated that machiavellianism scale had one item whose correlation coefficient was under 0.20, so it was dropped and then explanatory factor analysis was conducted for remaining 7 items. Factor analysis for machiavellianism scale results showed that 7 items gather in a single factor and 48.347% variances explained with 0.594 Crombach alpha values (Table 1).

Drory and Glukinos (1980) method was applied machiavellianism construct as low, middle and high degree of machiavellianism level of individuals. Total scores of machiavellianism were allocated below 25%, from 25% to 75% and above 75%, and entitled low, medium and high degree of machiavellianism. Frankly, machiavellianism was measured 7 items and total scores changed between 7 and 35. We separated 0 to 14 scores as low level mach personality, 15 to 27 scores as medium level mach and 28 to 35 as high level mach personality.

### 2.2.3 Unethical Behavior

*Unethical behavior* was measured adopting Chen and Tang’s (2006) as well as Wouters et al.’s (2014) single-dimension unethical behavior scales with 7 items. 5 points rated scale was used as well (1=never to 5=always).

Item-total statistics illustrated we did not have to drop any item for unethical behavior scale, because of having higher item total correlation coefficient than 0.20. Factor analysis for unethical behavior scale results indicated that 7 items loaded in a single factor as in previous researches. As seen in Table 1, unethical behavior scale explained 55.814 % variances with 0.859 Crombach alpha values.

Some of the analyses in this research, we applied Drory and Glukinos (1980) method unethical behavior as low, middle and high level of unethical behavior of individuals. Total scores of unethical behavior were allocated below

25%, from 25% to % 75% and above 75%, and entitled low, medium and high level of unethical behavior. Unethical behavior was measured 7 items and total scores changed between 7 and 35. For, unethical behavior was measures 7 items, 0 to 14 scores entitled low level unethical behavior, 15 to 27 scores as medium level unethical behavior and 28 to 35 as high level unethical behavior.

## 2.3 Results

Mean of love of money construct was 3.1934 (motivator 3.2319; importance 3.8454; rich 3.5467; power and success 2.2509 and evil 2.8745), machiavellianism was 2.8226 and unethical behavior was 1.9789. As seen scores for Table 2, love of money scores was above the mean, on the other hand; machiavellianism and unethical behavior means were below the mean.

**Table 2**  
**Descriptive Statistics**

Variables	N	Mean	Std. deviation
Love of money	360	3.1934	0.64398
Motivator	360	3.2319	0.96900
Importance	360	3.8454	0.79946
Rich	360	3.5467	0.97521
Power and success	360	2.2509	0.75174
Evil	360	2.8745	0.94267
Machiavellianism	360	2.8226	0.70435
Unethical behavior	360	1.9789	0.74478

### 2.3.1 Mediation Analyses of Machiavellianism on the Relationship Between Love of money and Unethical Behavior

In order to investigate mediating role of machiavellianism on the relationship between love of money and unethical behavior, we gathered data from 360 MBA students and analyzed it using Baron and Kenny’s (1986) methodology, as seen in Table 3.

Table 3 represented a series of regression analyses to investigate mediating role of machiavellianism on the relationship between love of money and unethical behavior. The first step regression analysis indicated that love of money was significantly related to unethical behavior ( $\beta=0.233$ ;  $p=0.00$ ). The second one illustrated that there was a significant relationship between love of money and machiavellianism ( $\beta=0.251$ ;  $p=0.00$ ). The third step regression analysis indicated a significant relationship between machiavellianism and unethical behavior ( $\beta=0.298$ ;  $p=0.00$ ). The fourth and last step regression analysis showed together with love of money and machiavellianism associated with unethical behavior. However, it can be seen reduction in beta coefficients of love of money in Table 3 ( $0.233 < 0.168$ ) and p values are still significant ( $p=0.00$ ). So *the first hypothesis* is accepted and machiavellianism partially mediates the relationship between love of money and unethical behavior.

**Table 3**  
**Hierarchical Regression Analysis Results**  
Hypotheses 1- First Step Regression Analysis

<b>Dependent variable:</b> Unethical behavior			
<b>Independent variable:</b> Love of money	<b>Beta</b>	<b>t</b>	<b>p</b>
	0.233	4.499	0.000
<b>R=0.233 Adjusted R<sup>2</sup>=0.051 F=20.241 p=0.000</b>			

Hypotheses 1- Second Step Regression Analysis

<b>Dependent variable:</b> Machiavellianism			
<b>Independent variable:</b> Love of money	<b>Beta</b>	<b>t</b>	<b>p</b>
	0.251	4.884	0.000
<b>R=0.251; Adjusted R<sup>2</sup>= 0.060 F= 23.854; p=0.000</b>			

Hypotheses 1- Third Step Regression Analysis

<b>Dependent variable:</b> Unethical behavior			
<b>Independent variables:</b>	<b>Beta</b>	<b>t</b>	<b>p</b>
Love of money	0.168	3.255	0.000
Machiavellianism	0.255	4.238	0.000
<b>R=0.339; Adjusted R<sup>2</sup>=0.110; F=22.982; p=0.000</b>			

**2.3.2 The Relationship Between Love of Money Level and Machiavellianism and Unethical Behavior Level**

In order to investigate individuals who are very little or very much fond of money represent which level of machiavellian personality and unethical behavior, it is suitable to do regression analysis. As indicated before, love of money scales reorganized as ordinal nature (very little/ very much fond of money) and machiavellianism and unethical behavior scales reorganized as ordinal nature (low-medium-high), too. Thus, we conducted logistic regression analyses to test the second and the third hypotheses. Because logistic regression is convenient

**Table 4**  
**Results of Ordinal Logistic Regression (Used Logit Link Function)**

	Variable	Estimate	odds = EXP(Est)	Sig.	Wald statis.	Test of parallel line(Chi-Sq/Sig)
MODEL1 love of money -> Mach.	Threshold Machiavellianism					2.214 / p= 0.137
	Low – medium	-1.039		0.04	3.672	
	Medium – high	2.753		0.00	13.98	
	Location Love of money (much fond)	1.771	5.87	0.02	5.544	
	Love of money (little fond)	0 <sup>a</sup>				
	Result Cox & Snell R <sup>2</sup> / Nagelkerke R <sup>2</sup> X <sup>2</sup> (Model Fit)					0.113 / 0.139 6.238; p=0.01
MODEL2 love of money -> Unethic. B	Threshold Unethical behavior					0.510 / p= 0.475
	Low – medium	0.809		0.04	2.246	
	Medium – high	4.234		0.00	22.21	
	Location Love of money (much fond)	1.278	3.58	0.04	4.027	
	Love of money (little fond)	0 <sup>a</sup>				
	Result Cox & snell R <sup>2</sup> / Nagelkerke R <sup>2</sup> X <sup>2</sup> (model fit)					0.081 / 0.099 4.366; p=0.037
MODEL3 Mach. -> Unethic. B	Threshold Unethical behavior					7.325 / p= 0.215
	Low – medium	-5.706		0.00	92.24	
	Medium – high	-1.536		0.00	15.47	
	Location Machiavellianism(high-medium)	-0.829	2.28	0.00	9.913	
	Machiavellianism(medium-low)	0 <sup>a</sup>				
	Result Cox & Snell R <sup>2</sup> / Nagelkerke R <sup>2</sup> X <sup>2</sup> (model fit)					0.051 / 0.066 19.015; p=0.000

Note. <sup>a</sup> This parameter is set zero because it is redundant. EXP: Exponent, Est: Estimate, Mach: Machiavellianism; Unethic. B: Unethical Behavior.

to test dependent or independent variables defined categorical and ordinal data in a single regression model (Özdamar, 2001; Hosmer and Lemeshow, 2004; Field, 2009; Nilsson, 2008, p.317). Especially ordinal logistic regression is suitable for ordinal dependent variable and metric, ordinal or categorical independent variables (Norusis, 2005; Özdamar, 2001).

Table 4 summarizes the Model 1 ordinal logistic regression results. A good overall fit was stated ( $X^2(1, N= 52) = 6.238; p=0.01$ ) and Cox & Snell  $R^2$  is 0.113 and Nagelkerke  $R^2$  is 0.139, so we can say general model was significant and love of money explained approximately 13 % variances of machiavellianism. The pseudo  $R^2$  measures are the proportion of variance for the dependent variable explained by the predictors. Test of parallel lines verified that one equation was enough to explain all pair of group and dependent variable relationship (Norusis, 2005; Nilsson, 2008). The model assumption of parallel lines was not violated as the test was non-significant ( $p= 0.13$ ). In addition, individuals being very much fond of money were 5.87 times more likely to represent a high degree of machiavellian personality with regard to middle and low machiavellian personality than individuals being very little fond of money. Similarly, individuals being very much fond of money were 5.87 times more likely to represent high and medium machiavellian personality with regard to low machiavellian personality than individuals being very little fond of money (test of parallel lines support this result). As a result, it can be said individuals being very much fond of money were more likely to represent upper level machiavellian personality than individuals being very little fond of money. As a consequence, Hypothesis 2 was supported.

Model 2 in Table 4 displays relatively good fit ( $X^2$  (1,  $N= 52$ ) = 4.366;  $p=0.03$ ) and Pseudo  $R^2$  values are about 0.081 and 0.10. Consequently, it could be claimed overall model was significant and love of money explains approximately 10 % variances of unethical behavior. Parallel lines test indicated non-significant results, so we could say one equation was valid for proportional odds tests. We could interpret that for one unit increase in love of money (from being very little fond of money to being very much fond of money) the odds representing high unethical behavior versus the combined middle and low unethical behavior categories were 3.58 greater, given that all of other variables in the model are held constant. Similarly, the odds of combined representing high and middle unethical behavior categories versus low were 3.58 times greater (test of parallel lines supports this result). So, it can be said individuals being very much fond of money were more likely to exhibit upper level unethical behavior than individuals being very little fond of money. Therefore, hypothesis 3 was supported.

Model 3 in Table 4 represent fairly good fit ( $X^2$  (1,  $N= 356$ ) = 19.015;  $p=0.00$ ) and Cox & Snell  $R^2$  and Nagelkerke  $R^2$  values indicate that machiavellianism explains 5%-7% variances of unethical behavior (test of parallel lines support this result). Odds values indicates that *high mach* individuals exhibit highly unethical behavior versus the combined middle and low unethical behavior categories were 2.28 times greater than *middle and low mach* individuals. We interpret also *high and middle mach* individual's exhibit combined high and middle unethical behavior versus low unethical behavior categories were 2.28 times greater than *low mach*

individuals. Therefore, higher degree machiavellian individuals are more likely to exhibit upper level unethical behavior than lower degree machiavellian individuals. So, hypothesis 4 was supported.

### 2.3.3 The Linkages Between Demographic Variables and Love of Money, Machiavellianism, Unethical Behavior Level

Taking demographic properties of individuals into consideration, we analyzed how differentiates their love of money, machiavellianism personality and unethical behavior level according to their age, gender, work experience, college major and whether they received an ethic lesson/ intervention during their university education or not. In order to achieve these issues, we conducted ordinal logistic regression analyses love of money, machiavellianism and unethical behavior scales with demographic variables. As mentioned before, love of money, machiavellianism and unethical behavior evaluated ordinal nature (low-medium-high) and demographic variables are categorical and ordinal as well. Research models were structured one dependent variable (love of money, machiavellianism or unethical behavior) and all independent variable (all demographic variables) in one single equation. So, three models were constituted each dependent variable.

The results of ordinal logistic regression indicated that none of demographic variables (age, gender, work experience, college major and whether they received an ethic lesson) relation with love of money was significant. In addition, the model had no good fit ( $X^2$  (11,  $N= 360$ ) = 7.603;  $p=0.72$ ) (Table 5 - Model 4). So we did not support the 5a hypothesis.

**Table 5**  
**Results of Ordinal Logistic Regression Between Demographic Characteristics and Love of Money, Machiavellianism as Well as Unethical Behavior (Used Logit Link Function)**

Variable		Estimate	odds = Exp(Est)	Sig.	Wald statis.	Test of parallel line(Chi-Sq/Sig)
	Love of money					10.338/ $p=0.500$
Threshold	Little-medium fond of money	-3.425		0.000	62.74	
	Medium-much fond of money	2.074		0.000	36.93	
	Ethics lesson (received)	-.456		0.852	1.448	
	Ethics lesson (not received)	0 <sup>a</sup>				
	Major (social science)	.203		0.567	0.328	
	Major (science)	0 <sup>a</sup>				
MODEL4	Age (above 30)	0.087		0.974	0.001	
	Age (31-35)	0.296		0.818	0.053	
all demog.-> love of money	Location	Age (up to 36)	0 <sup>a</sup>			
		Experience (0-5)	-2.667		0.373	0.793
		Experience (6-10)	-0.791		0.795	0.068
		Experience (11-15)	-0.865		0.592	0.287
		Experience (above 16)	0 <sup>a</sup>			
		Gender (man)	-.064		0.852	0.035
		Gender (woman)	0 <sup>a</sup>			
	Result	Cox&Snell $R^2$ /Nagelkerke $R^2$				
$X^2$ (model fit)						7.603; $p=0.72$

To be continued

Continued

	Variable	Estimate	odds = Exp(Est)	Sig.	Wald statis.	Test of parallel line(Chi-Sq/Sig)
MODEL 5 ethic interv. -> Mach.	Threshold Machiavellianism					14.558/ <i>p</i> =0.204
	Low – medium	-2.424		0.048	49.94	
	Medium – high	2.630		0.000	53.63	
	Location Ethic lesson (received)	- 0.721	2.05	0.045	4.535	
	Ethic lesson (not received)	0 <sup>a</sup>				
Result	Cox&Snell <i>R</i> <sup>2</sup> /Nagelkerke <i>R</i> <sup>2</sup> <i>χ</i> <sup>2</sup> (model fit)					0.0971 / 0.102 22.356; <i>p</i> =0.022
MODEL 6 gender -> Uneth. behavior	Threshold Unethical behavior					4.529 / <i>p</i> = 0.952
	Low – medium	- 0.246		0.029	11.09	
	Medium – high	3.798		0.000	59.56	
	Location Gender (male)	0.869	2.38	0.000	12.60	
	Gender (female)	0 <sup>a</sup>				
Result	Cox&Snell <i>R</i> <sup>2</sup> /Nagelkerke <i>R</i> <sup>2</sup> <i>χ</i> <sup>2</sup> (model fit)					0.092 / 0.118 29.294; <i>p</i> =0.02

Note. <sup>a</sup> This parameter is set zero because it is redundant. The group that has the least observation was defined as reference category. Dependent variable: Love of money (Model 4), Machiavellianism (Model 5), unethical behavior (Model 6), Independent Variables: Demographics (Ethics Intervention, Collage Major, Age, Experience, Genders) EXP: Exponent, Est: Estimate, All Demog: All Demographic Variables; Mach: Machiavellianism; Uneth.Behavior: Unethical Behavior.

The same procedures applied in order to put forth the relationship between demographics and love of money is conducted demographics and machiavellianism as well as demographics and unethical behavior. Model 5 in Table 5 represented relatively good fit ( $\chi^2(11, N=360) = 22,356; p=0.022$ ) and Pseudo *R*<sup>2</sup> values were about 0.971 and 0.102. Solely ethics lesson/ intervention were significant relation with machiavellianism among the other demographic variables, college major, age, experience and gender. Overall model was significant and whether receiving ethics lesson explained approximately 10% variance of unethical machiavellianism. Parallel lines test indicated non-significant results, so we can say one equation was valid for proportional odds tests. We could interpret that, for one unit increase in ethics lesson (not received to received) the odds representing high machiavellian personality versus the combined middle and low machiavellian personality categories were 2.05 greater, given that all of other variables in the model are held constant. Similarly, the odds of combined representing high and middle machiavellian personality categories versus low were 2.05 times greater (test of parallel lines supports this result). So, it could be said individuals not receiving ethics lesson were more likely to exhibit upper level machiavellian personality than individuals receiving ethics lesson. Therefore, hypothesis 5b was partially supported.

Only gender of the demographic variables was significantly associated with unethical behavior as seen in Table 5 and Model 6. A good overall fit was stated ( $\chi^2(11, N=360) = 29,294; p=0.02$ ) and Cox & Snell *R*<sup>2</sup> is 0.092 and Nagelkerke *R*<sup>2</sup> is 0.118, so we could say general model was significant and gender explained approximately 10%

variances of unethical behavior. There was no problem for test of parallel lines significant level (*p*= 0.95). In addition, male respondents were 2.38 times more likely to represent high level unethical behavior with regard to middle and low level unethical behavior than female counterparts. Likewise, males were 2.38 times more likely to represent high and medium level unethical behavior with regard to low level unethical behavior than females (test of parallel lines support this result). As a result, it could be comment males are more likely to represent upper level unethical behavior than females. As a consequence, hypothesis 5c was partially supported.

## CONCLUSION AND DISCUSSION

Growing body of literature indicates machiavellianism need to be investigated more, especially after witnessed the scandals of the corporation. Machiavellianism is explained at the root of expediency, manipulation, deception and innocent of merit of trust, dignity and kindness (Christie & Geis, 1970). Following the description, we investigate when individuals represent machiavellian personality and what induces the machiavellianism. Proving it, we evaluated individuals' love of money explain their inclination towards machiavellianism tendency. On the other hand, many researches indicate machiavellian personality enforces people to exhibit deviance behavior (Bennett & Robinson, 2000; Tang & Chen 2008; Lehman & Simpson, 1992), such as unethical behavior.

Some researches indicate business education causes materialism that provokes individuals to behave unethically (Giacalone, 2004). In addition, emerging

stream of work about love of money, machiavellianism, unethical behavior was conducted in business students (McCabe et al., 1991; Chen & Tang, 2006; Tang & Chen, 2008), MBA students (Siegel, 1973; Tang & Chiu, 2003), managers (House et al., 1991; Siegel, 1973; Drory and Gluskinos, 1980), faculty colleagues (Siegel, 1973; Tang & Chiu, 2003). A research in the literature indicates MBA students' unethical behavior higher when they are in competition and they are awarded for their unethical behaviors (Hegarty & Sims, 1978). Following the previous research, we focused 360 MBA students in a public university to reveal relationship between their love of money, machiavellianism and unethical behavior.

The results indicate that individuals are quite fond of money. However, they have no high level machiavellian personality and avoid behave unethically as long as they could. Also, there is significant relationship between love of money and machiavellianism. In addition to machiavellianism is associated with unethical behavior. Furthermore, there is a relationship between love of money and unethical behavior directly and by means of machiavellianism indirectly. In other words, explaining the effect of love of money on unethical behavior, we should investigate individuals' machiavellian personality. As a result, machiavellianism is partially mediated the relationship between love of money and unethical behavior.

In this research, focusing individuals' passion for money or wealth, we aim to illuminate the issue whether individual groups being very much and very little fond of money represent different level of machiavellian personality and unethical behavior. Conducting a series analysis, we found individuals being very much fond of money are more likely to represent upper level machiavellian personality than individuals being very little fond of money. Findings represented that individuals being very much fond of money are more likely to exhibit upper level unethical behavior than individuals being very little fond of money. These results can be explained via the dark side of money induces individual to engage in unfair practices. On the other hand, we investigated the higher and lower mach individuals' unethical behavior inclination and found higher degree machiavellian individuals more likely to represent upper level unethical behavior than lower degree machiavellian individuals. This finding confirms Winter et al.'s (2004) study to show higher and lower machiavellian propensity to engage in unethical behavior.

There can be found in many researches indicating demographic characteristics explain the construction of love of money, machiavellianism and unethical behavior. The result pertaining to demographics is that males are more likely to represent upper level unethical behavior than females. These results can be clarified in terms of Betz et al.'s (1989) research indicating Male students have higher concerns about career advancement and more likely to engage in unfair practices as their female counterparts. Another evidence from this research

represents individuals not having received ethics lesson are more likely to exhibit upper level machiavellian personality than individuals having received ethics lesson. The difference between individuals having received ethics lessons and not received can be come from business education differences as it was mentioned by Giacalone (2004). This result proved the previous researches about psychology, law and business students' differences explored by McCabe et al., (1991), Chen and Tang (2006), Tang and Chen (2008).

Overall literature review and results of this study represented that unethical behavior could be explained individual's love of money and machiavellian personality. Especially the level of love of money is a key construct to predict individuals' machiavellian personality and unethical behavior level. Discriminating individuals being very much fond of money from individuals being very little fond of money enables us to interpret the concept of machiavellianism as high and low mach individuals as well as unethical behavior as high and low level unethical behavior of individuals. Considering that some individuals could behave unethically for their personal interest, it is beneficial to add ethics lesson in education program of the university. Furthermore, individuals' love of money and Machiavellian personality are concepts waiting to be investigating more by researches. Unfortunately, explaining unethical behavior and taking precautions to decrease individuals' unethical behavior propensity are the issues that will be attracted the researchers' attention in the future.

---

## REFERENCES

---

- Ahuvia, A., & Wong, N. (1995). Materialism: Origins and implications for personal well-being. *European Advances in Consumer Research*, 2, 172-178.
- Agarwal, J., & Malloy D. C. (1999). Ethical work climate dimensions in a not-for-profit organization: An empirical study. *Journal of Business Ethics*, 20(1), 1-14.
- Allmon, D. E., Page D., & Roberts, R. (2000). Determinants of perceptions of cheating: Ethical orientation, personality, and demographics. *Journal of Business Ethics*, 23(4), 411-422.
- Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, 51(6), 1173-1182.
- Belk, R. W., & Wallendorf, M. (1990). The sacred meanings of money. *Journal of Economic Psychology*, 11(1), 35-67.
- Bennett, R. J., & Robinson, S. L. (2000). Development of a measure of workplace deviance. *Journal of Applied Psychology*, 85(3), 349-360.
- Betz, M., O'Connell L., & Shephard J. M. (1989). Gender Differences in Proclivity for Unethical Behavior. *Journal of Business Ethics*, 8(5), 321-324.
- Beu, D. S., Buckley, M. R., & Harvey, M. G. (2003). Ethical decision-making: A multidimensional construct. *Business Ethics: A European Review*, 12(1), 1-3.

- Chen, Y. J., & Tang, T. L. P. (2006). Attitude toward and propensity to engage in unethical behavior: Measurement invariance across major among university students. *Journal of Business Ethics, 69*(1), 77-93.
- Christie, R., & Geis, F. L. (1970). *Studies in machiavellianism* (p.106). Academic Press, New York.
- Cohen, P., & Cohen, J. (1996). *Life values and adolescent mental Health*. Erlbaum, Mahwah, NJ.
- Dahling, J. J., Whitaker, B. G., & Levy, P. E. (2009). The development and validation of a new Machiavellianism scale. *Journal of Management, 39*, 219-257.
- Deluga, R. J. (2001). American presidential Machiavellianism: Implications for charismatic leadership and rated performance. *The Leadership Quarterly, 12*(3), 339-363.
- Den Hartog, D. N., & Belschak, F. D. (2012). Work engagement and Machiavellianism in the ethical leadership process. *Journal of Business Ethics, 107*(1) 35-47.
- Deshpande, S. P. (1997). Manager's perception of proper ethical conduct: The effect of sex, age, and level of education. *Journal of Business Ethics, 16*(1), 79-85.
- Drory, A., & Gluskinos, U. M. (1980). Machiavellianism and leadership. *Journal of Applied Psychology, 65*(1), 81-86.
- Egan, V., Hughes, N., & Palmer, E. J. (2015). Moral disengagement, the dark triad, and unethical consumer attitudes. *Personality and Individual Differences, 76*, 128.
- Etzioni, A. (2002). When it comes to ethics, b-schools get an f. *The Washington Post*, August 4, B4.
- Fehr, B., Samson, D., & Paulhus, D. L. (1992). The construct of Machiavellianism: Twenty years later. In C. Spielberger & J. Butcher (Eds.), *Advances in personality assessment*, (Vol. 9, pp.77-116). Lawrence Erlbaum, Hillsdale, NJ.
- Feiner, M. (2004) *The Feiner points of leadership: The 50 basic laws that will make people want to perform better for you*, Warner Business Books, New York.
- Field A., (2009). *Discovering statistics using SPSS*. Sage Publications, London.
- Furnham, A., & Argyle, M. (1998). *The psychology of money*. Psychology Press, London.
- Furnham, A. (1984). Many sides of the coin: The psychology of money usage. *Personality and individual Differences, 5*(5), 501-509.
- Fraedrich, J., Ferrell, O. C., & Pride, W. (1989). An empirical examination of three Machiavellian concepts: Advertisers vs. the general public. *Journal of Business Ethics, 8*(9), 687-694.
- Giacalone, R. A. (2004). A Transcendent Business Education for the 21st Century. *Academy of Management Learning & Education, 3*(4), 415-420.
- Gupta, N., & Shaw, J. D. (1998). Let the evidence speak: Financial incentives are effective. *Compensation & Benefits Review, 30*(2), 26-32.
- Harrell, W. A., & Hartnagel, T. (1976). The impact of Machiavellianism and the trustfulness of the victim on laboratory theft. *Sociometry, 39*(2), 157-165.
- Hegarty, W. H., & Sims, H. P. (1978). Some determinants of unethical decision behavior: An experiment. *Journal of Applied Psychology, 63*(4), 451-457.
- House, R. J., Spangler, W. D., & Woycke, J. (1991). Personality and charisma in the US presidency: A psychological theory of leader effectiveness. *Administrative Science Quarterly, 34*(3), 364-396.
- Herzberg, F. (1984). One more time: How do you motivate employees? In J. N. Williamson (Eds.), *The leader manager*, (pp. 433-449). Jonn Willey & Sons, Canada.
- Hoffman, J. J. (1998). Are women really more ethical than men? Maybe It depends on the situation. *Journal of Managerial Issues 10*(1), 60-73.
- Hosmer Jr, D. W., & Lemeshow, S. (2004). *Applied logistic regression*. John Wiley & Sons.
- Kasser, T., & Ryan, R. M. (1993). A dark side of the American dream: Correlates of financial success as a central life aspiration. *Journal of Personality and Social Psychology, 65*(2), 410-422.
- Kasser, T., & Ryan, R. M. (1996). Further examining the American dream: Differential correlates of intrinsic and extrinsic goals. *Personality and Social Psychology Bulletin, 22*, 280- 287.
- Kasser, T., & Ryan, R. M. (2001). Be careful what you wish for: Optimal functioning and the relative attainment of intrinsic and extrinsic goals. In P. Schmuck & K. M. Sheldon (Eds.), *Life goals and well-being: Towards a positive psychology of human striving* (pp.116-131). Hogrefe & Huber, Goettingen, Germany.
- Kochan, T. A. (2002). Addressing the crisis in confidence in corporations: Root causes, victims, and strategies for reform. *Academy of Management Executive, 16*(3), 139-141.
- Kohn, A. (1993). Why incentive plans cannot work. *Harvard Business Review, 71*(5), 54-63.
- Langevin, P., & Mendoza, C. (2013). How can management control system fairness reduce managers' unethical behaviours? *European Management Journal, 31*(3), 209-222.
- Lawler, E. L. (1971). *Pay and organization effectiveness: A psychological view*. McGraw Hill, New York.
- Lehman, W. E., & Simpson, D. D. (1992). Employee substance use and on-the-job behaviors. *Journal of Applied Psychology, 77*(3), 309-321.
- Machiavelli, N. (2014). *Prens*. In L. T. Basmacı (Trans.). Remzi Presss, Istanbul, Turkey. (Original publication date 1532)
- Malinowski, C., & Berger K. A. (1996). Undergraduate student attitudes about hypothetical marketing dilemmas. *Journal of Business Ethics, 15*(5), 525-535.
- McCabe, D. L., Dukerich, J. M., & Dutton, J. E. (1991). Context, values and moral dilemmas: Comparing the choices of business and law school students. *Journal of Business Ethics, 10*(12), 951-960.
- Mc Hoskey, J. W. (1999). Machiavellianism, intrinsic versus extrinsic goals, and social interest: A self-determination theory analysis. *Motivation and Emotion, 23*(4), 267-283.
- Mick, D. G. (1996). Are studies of dark side variables confounded by socially desirable responding? The case of materialism. *Journal of Consumer Research, 23*(2), 106-119.

- Mitchell, T. R., Dakin, S., Mickel, A., & Gray, S. (1998). The measurement of money importance. *Paper Presented at the Annual Meeting of the Academy of Management*, San Diego.
- Mitchell, T. R., & Mickel, A. E. (1999). The meaning of money: An individual-difference perspective. *Academy of Management Review*, 24(3), 568-578.
- Moore, C., Detert, J. R., Klebe Treviño, L., Baker, V. L., & Mayer, D. M. (2012). Why employees do bad things: Moral disengagement and unethical organizational behavior. *Personnel Psychology*, 65(1), 1-48.
- Mudrack, P. E. (1990). Machiavellianism and locus of control: A meta-analytic review. *The Journal of Social Psychology*, 130(1), 125-126.
- Mudrack, P. E. (1993). An investigation into the acceptability of workplace behaviors of a dubious ethical nature. *Journal of Business Ethics*, 12(7), 517-524.
- Nilsson, J. (2008). Investment with a conscience: Examining the impact of pro-social attitudes and perceived financial performance on socially responsible investment behavior. *Journal of Business Ethics*, 83(2), 307-325.
- Norusis, M. (2005). *SPSS advanced statistical procedures companion*. Prentice Hall, Upper Saddle River, NJ.
- Ochulor, C. L. (2011). Ethical and moral implications of corruption. *Canadian Social Science*, 7(5), 223-228.
- Özdamar, K. (2001). *SPSS ile biyoistatistik* (pp.343-360). Kaan Publishing, Eskisehir.
- Poduska, B. (1992). Money, marriage, and Maslow's hierarchy of needs. *American Behavioral Scientist*, 35(6), 756-770.
- Rayburn, J. M., & L. G. Rayburn (1996). Relationship between machiavellianism and type a personality and ethical-orientation. *Journal of Business Ethics*, 15(11), 1209-1219.
- Ritter, B. A. (2006). Can business ethics be trained? A study of the ethical decision-making process in business students. *Journal of Business Ethics*, 68(2), 153-164.
- Sakalaki, M., Richardson, C., & Thépaut, Y. (2007). Machiavellianism and economic opportunism. *Journal of Applied Social Psychology*, 37(6), 1181-1190.
- Sardžoska, E. G., & Tang, T. L. P. (2012). Work-related behavioral intentions in Macedonia: Coping strategies, work environment, love of money, job satisfaction, and demographic variables. *Journal of Business Ethics*, 108(3), 373-391.
- Siegel, J. P. (1973). Machiavellianism, MBA's and managers: Leadership correlates and socialization effects. *Academy of Management Journal*, 16(3), 404-411.
- Tang, T. L. P. (1995). The development of a short money ethic scale: Attitudes toward money and pay satisfaction revisited. *Personality and Individual Differences*, 19(6), 809-816.
- Tang, T. L. P., & Chiu, R. K. (2003). Income, money ethic, pay satisfaction, commitment, and unethical behavior: Is the love of money the root of evil for Hong Kong employees? *Journal of Business Ethics*, 46(1), 13-30.
- Tang, T. L. P., Tang, T. L. N., & Homaifar, B. Y. (2006). Income, the love of money, pay comparison, and pay satisfaction: Race and gender as moderators. *Journal of Managerial Psychology*, 21(5), 476-491.
- Tang, T. L. P., & Chen, Y. J. (2008). Intelligence vs. wisdom: The love of money, Machiavellianism, and unethical behavior across college major and gender. *Journal of Business Ethics*, 82(1), 1-26.
- Tang, T., Chen, Y. J., & Sutarso, T. (2008). Bad apples in bad (business) barrels: The love of money, Machiavellianism, risk tolerance, and unethical behavior. *Management Decision*, 46(2), 243-263.
- Turan, A. (2014). Sosyal Sermayenin bilgi paylaşma tutumuna etkisinde motivasyonun rolü: Telekomünikasyon Sektöründe Bir Araştırma. *Yönetim: İstanbul Üniversitesi İşletme İktisadi Enstitüsü Dergisi*, 76, 204-231.
- Webster, R. L., & Harmon H. A. (2002). Comparing levels of machiavellianism of today's college students with college students of the 1960s. *Teaching Business Ethics*, 8(4) 435-445.
- Williams, G. C., Cox, E. M., Hedberg, V. A., & Deci, E. L. (2000). Extrinsic life goals and health risk behaviors in adolescents. *Journal of Applied Social Psychology*, 30(8), 1756-1771.
- Winter, S. J., Stylianou, A. C., & Giacalone, R. A. (2004). Individual differences in the acceptability of unethical information technology practices: The case of Machiavellianism and ethical ideology. *Journal of Business Ethics*, 54(3), 273-301.
- Wilson, D. S., Near, D., & Miller, R. R. (1996). Machiavellianism: A synthesis of the evolutionary and psychological literatures. *Psychological Bulletin*, 119(2), 285-299.
- Wiggins, J. S., & Broughton, R. (1985). The interpersonal circle: A structural model for the integration of personality research. *Perspectives in personality*, 1, 1-47.
- Wright, J. P., Cullen, F. T., Agnew, R. S., & Brezina, T. (2001). "The root of all evil"? An exploratory study of money and delinquent involvement. *Justice Quarterly*, 18(2), 239-268.
- Wouters, K., Maesschalck, J., Peeters, C. F., & Roosen, M. (2014). Methodological issues in the design of online surveys for measuring unethical work behavior: Recommendations on the basis of a split-ballot experiment. *Journal of Business Ethics*, 120(2), 275-289.
- Vardi, Y., & Wiener, Y. (1996). Misbehavior in organizations: A motivational framework. *Organization Science*, 7(2), 151-165.
- Victor, B., & Cullen, J. B. (1988). The organizational bases of ethical work climates. *Administrative Science Quarterly*, 33(1), 101-125.
- Vitell, S. J., Paolillo, J. G., & Singh, J. J. (2006). The role of money and religiosity in determining consumers' ethical beliefs. *Journal of Business Ethics*, 64(2), 117-124.
- Zagenczyk, T. J., Restubog, S. L. D., Kiewitz, C., Kiazad, K., & Tang, R. L. (2014). Psychological contracts as a mediator between Machiavellianism and employee citizenship and deviant behaviors. *Journal of Management*, 40(4) 1098-1122.
- Zin, S. M., Ahmad, N., Ngah, N. E., Ismail, R., Abdullah, I. H. T., & Ibrahim, N. (2011). Effects of Machiavellianism on ingratiation in organizational settings. *Canadian Social Science*, 7(2), 183-190.