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# Work-Related Behavioral Intentions in Macedonia: Coping Strategies, Work Environment, Love of Money, Job Satisfaction, and Demographic Variables

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**Abstract** Based on theory of planned behavior, we develop a theoretical model involving love of money (LOM), job satisfaction (attitude), coping strategies/responses (perceived behavioral control), work environment (subjective norm), and work-related behavioral intentions (behavioral intention). We tested this model using job satisfaction as a mediator and sector (public versus private), personal character (good apples versus bad apples), gender, and income as moderators in a sample of 515 employees and their managers in the Republic of Macedonia. For the whole sample, both coping strategies and helpful work environment were related to high job satisfaction. The relationship between work environment and job satisfaction was the strongest link in all subsequent analyses. High LOM is associated with unfavorable work environment for employees in the private sectors and people with low income and is positively associated with coping strategies for bad apples. A favorable work environment was related to less corrupt intent for people in the public sectors, good apples, and with low income, but not for their counterparts. Coping strategies were related to high job satisfaction for males, but not for females. Our counterintuitive results showed that bad apples' high LOM was related to low corrupt intent. Our theoretical model sheds new light and provides novel theoretical, empirical, and practical implications to Macedonian managers' corrupt intent.

**Keywords** Money ethics · Intrinsic and extrinsic · Approach · Avoidance · Cognitive · Behavioral · Relationship · Personal growth · System maintenance-change · GDP · CPI · Counterproductive · Organizational deviance · Bad apples · Bad cases · Bad barrels · Spirituality and religion · Unethical

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## Introduction

From the global perspective, the reunification of Germany, the restructuring of the former Soviet Union, the formation of the European Union (EU), the adaptation of a common currency, the Euro, in 12 European countries on January 1, 2002, and the expansion of the EU to 27 sovereign countries have reduced many trade barriers, enhanced the flow of products, services, money, and human resources across borders, and created a single free market around the world. Researchers and executives have great interests in increasing profits across cultures in the global market. In this study, we focus on one country—Macedonia. Since her independence in 1991, Macedonia has been ranked as the fourth best economic reformer among 178 countries, according to the World Bank. Macedonia is a member of the United Nations and associate member of World Trade Organization (WTO). It seeks to join the EU. With a 2010 GDP per capita of $4,657, a 5-year GDP per capita growth rate of 4.31%, and a population of 2 million people, it offers a great potential for foreign direct investment (FDI) and expansion.

Scholars and practitioners want to know whether management theories and constructs developed in the US will

be applicable to people in other cultures around the world (Hofstede 1980; House et al. 2002; Tang et al. 2006a, b, 2011b, c). We found not only very little research in and on Macedonia (Sardžoska 2006; Tang et al. 2004), but also practically nothing about Macedonian managers and employees' money attitudes, job satisfaction, coping strategies, work environment, and corruption. Specifically, on October 10, 2011, a quick search using the ISI (Web of Knowledge) data base showed that no research has been published in *Journal of Business Ethics* using the following terms: work environment and coping strategy; work environment and job satisfaction; coping strategy and job satisfaction; and coping strategy and corruption. Furthermore, we found only very limited number of articles in the following areas: e.g., one paper on corruption and love of money (LOM), or Macedonia (Sardžoska and Tang 2009); two articles on job satisfaction and corruption (Chen and Tang 2006; Sardžoska and Tang 2009); and three papers on work environment and corruption (Dunfee and Warren 2001; Van Zyl and Lazenby 2002; Waddock 2004). Although we may have missed many articles without using these terms in the abstracts or keywords, we assert that it is rare for researchers to study these aforementioned variables in *Journal of Business Ethics*.

According to the theory of planned behavior (TPB, Ajzen 1991), attitudes toward the behavior, subjective norms, and perceived behavioral control predict behavioral intention that, in turn, predicts actual behavior. TPB has been widely examined across different fields (Armitage and Conner 2001; Manning 2009). Very few studies, however, have been conducted outside the US, and even fewer in entities at the bottom of the income pyramid (Prahalad and Hammond 2002). The contribution of TPB is not as ubiquitous as most researchers once thought, particularly in under-researched areas of the world (Kirkman and Law 2005).

Recently, Sardžoska and Tang (2009) found that Macedonian managers' LOM was ***not*** related to unethical behavior intentions. Due to this counterintuitive finding, we set out to explore further, identify factors that may contribute to Macedonian managers' corrupt intent in this uncharted area of research, and fill the void. Grounded in the TPB (Ajzen 1991) and the person-situation interactionist model (Kish-Gephart et al. 2010), we examine managers' work-related corrupt intent (Li et al. 2006; Tang and Chen 2008; Tang et al. 2011b, c) from three separate perspectives: (1) individual attitude—the LOM (Tang 1992; Tang and Chiu 2003) and intrinsic and extrinsic job satisfaction (Weiss et al. 1967), (2) subjective social norms (psychological climate)—the work environment (Insel and Moos 1994), and (3) perceived behavioral control—coping strategies (Moos 1995) (Fig. 1). We test this model based on data collected from 515 employees and their managers (we use the term managers thereafter) in the Republic of Macedonia and treat job satisfaction as a mediator and demographic variables such as sector (public versus private), personal character (good versus bad apples) (Treviño and Youngblood 1990; Tang et al. 2008a), gender, and income as moderators in separate multiple-group analyses. Our counterintuitive, novel, and original findings may offer theoretical, empirical, and practical contributions (Colquitt and Zapata-Phelan 2007) and further theory development, theory testing, and improved practice.

## Theory and Hypotheses

We introduce all constructs in this section. Kish-Gephart et al. (2010) examined behavioral ethics from the perspectives of bad apples (individual), bad cases (moral issue), and bad barrels (organizational environment). Sometimes a few unsavory individuals who lack in some personal quality (e.g., moral character) are labeled as bad apples (Treviño and Youngblood 1990). Among bad apples' dispositional variables at the individual level, researchers have investigated the relationship between money attitudes, such as the LOM, and the propensity to engage in unethical behavior (Tang and Chen 2008; Vitell et al. 2006). We turn to individuals' attitude first.

### The Love of Money

A construct (LOM) is abstract and latent rather than concrete and observable. Scientists put together from their imaginations and intentionally capture the conceptual constructs with observable items (indicators). Thus, causality flows from the latent constructs to the items. Observable items are considered as "an imperfect *reflection* of the underlying latent construct" (MacKenzie et al.

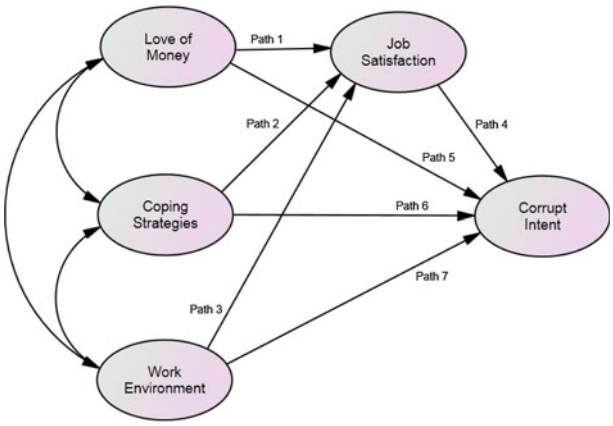


**Fig. 1** Our theoretical model

2011, p. 295). In this study, we treat each of the five constructs as a "reflective" model (MacKenzie et al. 2011).

Among many money attitudes (Furnham and Argyle 1998; Mitchell and Mickel 1999; Srivastava et al. 2001; Tang 1992; Vohs et al. 2006; Wernimont and Fitzpatrick 1972; Yamauchi and Templer 1982), we select the 12-item, 4-factor LOM construct which was developed based on ancient wisdom: "People who want to get rich fall into temptation and a trap and into many foolish and harmful desires that plunge men into ruin and destruction. For the love of money is the root of all evil" (1 Timothy, 6: 9–10). LOM is defined as one's attitudes toward money including affective, behavioral, and cognitive components; the meaning one attributes to money; one's desire or aspiration for money; not one's need, greed, or materialism (Tang et al. 2011a); a multi-dimensional individual difference variable; and a second-order latent construct with several first-order latent sub-constructs (Tang et al. 2006a, b). This construct, a subset of the Money Ethic Scale, is one of the most well-developed and systematically used measures of money attitude (Colquitt et al. 2011; Lea and Webley 2006; Mickel and Barron 2008; Mitchell and Mickel 1999). It has been examined in about three dozen countries/entities around the world (Gbadamosi and Joubert 2005; Liu and Tang 2011; Tang et al. 2011b, c; Vitell et al. 2006) and cited in various books (Colquitt et al. 2011; Furnham and Argyle 1998; McShane and Von Glinow 2008; Milkovich et al. 2011; Rynes and Gerhart 2000). This construct predicts unethical behavior intention in a two-wave panel study (Tang and Chen 2008).

Among Factors Rich, Motivator, Importance, and Power, Factor **Rich** is the most important sub-construct that predicts unethical behavior intentions (Vitell et al. 2006). To some, money is a **motivator** because nothing comes close to money in improving task performance (Locke et al. 1980; Milkovich et al. 2011). Money leads to movement (Herzberg 1987) and whatever gets measured (paid) gets done (Ariely 2010). The most consistent thread is the "emphasis on its **importance**" (Mitchell and Mickel 1999, p. 569). Money represents **power** (Tang 1992, 1993; Zhou et al. 2009).

### Job Satisfaction

Job satisfaction is "a pleasurable or positive emotional state resulting from the appraisal of one's job or job experiences" (Locke 1976, p. 1300). Among measures of job satisfaction (Smith et al. 1969; Wanous et al. 1997; Weiss et al. 1967), we select one of the most popular measures: the Minnesota Satisfaction Questionnaire (Weiss et al. 1967). Research shows that low satisfaction is related to high counterproductive behaviors and corruption (Cohen-Charash and Spector 2001; Colquitt et al. 2001; Tang et al. 2011c).

### Coping Strategies

Most people have some control over their responses to the stimuli (the stressors) in an environment. There are two main conceptual approaches to classify coping responses (Moos 1995). One stresses the ***focus*** of coping: People can "approach" the problem and make active efforts to resolve the problems, or try to "avoid" the problem or focus on managing the emotions associated with it. The other is the ***method*** of coping—i.e., cognitive or behavioral. When facing challenges, most people adopt different coping strategies (Carver et al. 1989; Moos 1995; Scheier et al. 1986; Suls and Fletcher 1985) which help them determine their behavioral intentions. In this study, we investigate the 48-item Coping Responses Inventory (CRI) (Moos 1993, 1995) which combines these two approaches and organizes coping responses into eight dimensions (six items for each dimension).

### Work Environment

Most people look to the social context to determine what is ethically right and wrong (Bandura 1977), obey authority figures (Litzky et al. 2006; Milgram 1974) and laws, and do what is rewarded (Skinner 1972). Getting Harvard, MIT, Yale, and Princeton students to contemplate their own ethical values by "recalling the Ten Commandments or signing an honor code" eliminates cheating completely, while offering "poker chips" to redeem for cash, a few seconds later, *doubles* the level of cheating (Ariely 2008, p. 24). Organizations with a supportive culture (O'Reilly et al. 1991; Peters and Waterman 1982; Schein 1990), ethical climate (Ulrich et al. 2007; Victor and Cullen 1988) and innovative work environment (Amabile et al. 1996) promote employees' ethical behavior, creativity, and performance. A favorable work environment increases satisfaction, commitment, and performance (Kristof-Brown et al. 2005; Vancouver and Schmitt 1991). We employ the 90-item Work Environment Scale (WES) (Moos 1994) with three dimensions: (1) relationship, (2) personal growth or goal orientation, and (3) system maintenance and system change. It measures the unique "personality" of the work unit. When people have personal interests in each other, for example, they trust each other (Gilbert and Tang 1998), eat lunch together, and think that the social climate is cohesive.

### Propensity to Engage in Unethical Behavior (PUB) and Work-Related Corrupt Intent

The convergence of the incumbent's self-report and the coworker's peer-report on counterproductive behavior (De Jonge and Peeters 2009; Fox et al. 2007) suggests that self-reported corrupt intent (intention) is a reasonable surrogate measure of corruption (behavior) (Martin et al.

2007; Richman et al. 1999). Corruption reflects not only the corrupt behavior of an individual—defined as the illicit use of one's position or power for perceived personal or collective gain—but also the dangerous, virus like infection of a group, organization, industry, and country (Ashforth et al. 2008). Among constructs such as workplace deviance (Robinson and Bennett 2000), counterproductive behavior (Cohen-Charash and Spector 2001), theft (Greenberg 1993; Lim 2002; Weber et al. 2003), corruption (Anand et al. 2004), whistle blowing (Dozier and Miceli 1985), organizational misbehavior (Vardi and Weitz 2004), and unethical behavior (Ivancevich et al. 2005; Tang and Chiu 2003), we select the Propensity to Engage in Unethical Behavior Scale (PUB) (Chen and Tang 2006) with Factors Resource Abuse, Not Whistle Blowing, Theft, and Corruption. First, we investigate all four factors of PUB (Chen and Tang 2006; Tang and Chen 2008; Tang and Tang 2010). Second, we treat the seven-item "Work-Related Corrupt Intent" Scale, a sub-scale of PUB, as our major dependent variable in this study. This sub-construct has been examined in large cross-cultural studies (Tang et al. 2011b, c). After defining all constructs in our theoretical model, we now turn to the relationships among constructs.

## Our Theoretical Model

### *Love of Money*

Those who value money as their achievement, respect, and power have high external locus of control and low subjective well-being (Tang 1993, 2007). Because they want to be rich, their thoughts are controlled by money which may cause them to become corrupt. Since the LOM is the root of all evil and corruption is a part of evil, high love-of-money managers have high corrupt intent (Tang and Chiu 2003; Tang et al. 2011b; Vitell et al. 2006) (Fig. 1, Path 5).

### *Job Satisfaction*

Hong Kong managers' LOM is directly related to unethical intention, and indirectly related to corruption, through low pay satisfaction (Tang and Chiu 2003). High love-of-money individuals compare themselves with the rich and are dissatisfied with their pay. Perceived injustice leads to counterproductive behavior (Cohen-Charash and Spector 2001) and stealing in the name of justice (Greenberg 1993). We do not study pay satisfaction, but focus on intrinsic and extrinsic job satisfaction in this study. Following Tang and Chiu (2003), we assert that besides the direct impact (Path 5), the LOM may have an indirect impact on corrupt intent through job dissatisfaction (Paths 1 and 4).

### *Work Environment*

Thinking about money activates feelings of *self-sufficiency* leading to the desire to be independent, reduce requests for help, donate less money to charity, and keep a large physical distance between themselves and others (Vohs et al. 2006). Counting 80 $100 bills (compared to 80 pieces of paper) reduces people's physical pain (Zhou et al. 2009). Anticipation of pain heightens the desire for money (Zhou and Gao 2008). The visible presence of abundant wealth ($7,000 in $1 bills piled on two tables) provokes a feeling of "envy toward wealthy others" that, in turn, causes a significantly higher *percentage* of participants to engage in and a much larger *magnitude* of cheating for personal gains than without such abundance of money (Gino and Pierce 2009, p. 142). Thus, work environment matters.

In the social context (subjective norms, Ajzen 1991), people who do not share the values of their organization experience high levels of job anxiety and tension (Posner et al. 1985). A favorable work environment enhances role clarity and organizational commitment (Hunt et al. 1989) and reduces role conflict and role ambiguity (Shih and Chen 2006) that leads to high job satisfaction (Stansfeld and Candy 2006). Objective income, financial experiences, and ethical values or social norms *shape* one's LOM and ethical behavior (Tang et al. 2005). We assert: Favorable work environment is related to high job satisfaction (Path 3) and low corrupt intent (Path 7).

### *Coping Strategies*

Fisman and Miguel (2007) examine parking violations among United Nations diplomats from all over the world living in New York City and conclude that switching from no enforcement of parking violations (offer protection for diplomatic immunity) to a strong enforcement of new laws (confiscate violators' diplomatic license) causes diplomats to avoid punishment and curb parking violations significantly. Avoidance is associated with more positive adaptation in the short run. The use of wishful thinking or the *avoidance* coping strategy is associated with symptoms of general distress (Boumans and Landeweerd 1992; Hatton et al. 1995), while solving problems directly using the *approach* coping strategy reduces stress (Holahan et al. 2005) in the long run. People with high conscientiousness use problem-focused coping strategies (Bartley and Roesch 2011). We posit: People with effective coping strategies can handle their work-related activities well and have high intrinsic and extrinsic job satisfaction (Path 2). Since very little research has examined the relationship between coping strategies and corrupt intent (Doh et al. 2003), we examine this relationship on an exploratory basis (Path 6). We examine moderators, next.

## Moderators

### *Good Versus Bad Apples*

Transparency International's (TI) defines corruption as the abuse of entrusted power for private gain in the public sector. Corruption Perceptions Index (CPI) is a proxy of social norms, ethical/unethical climate, or good/bad barrels at the entity level (Martin and Cullen 2006). Macedonia's 2005 CPI score (CPI = 2.7) denotes less favorable life and work environment. Due to this unfavorable work environment, some managers may act opportunistically with self-interest and guile.

Based on the sub-constructs of the PUB measure (Chen and Tang 2006; Tang et al. 2008a, b), we use cluster analysis to identify good apples and bad apples (Tang et al. 2008a). Good apples and bad apples have different ethical standards and corrupt intent. Many bad apples have high pay satisfaction due to a high amount of money earned legally and illegally through corruption (bribery and kickbacks) (Tang et al. 2011b, c). Further, the relationship between income and LOM is *negative* among highly paid professionals (Tang and Chiu 2003), *non-significant* among adequately paid males and Caucasians, but *positive* among underpaid females and African-Americans in the US (Tang et al. 2006b). Females and African-Americans have lower pay than their male and Caucasian counterparts, respectively. We argue that *underpaid* people have high love money; *highly* paid ones have low LOM, in general.

Following the Matthew Effect (Merton 1968; Tang 1996),[1] the rich have the winner-take-all mentality. Due to the abundant effect and having a large amount of money (obtained legally or illegally) (Gino and Pierce 2009; Zhou et al. 2009), these bad apples have a sense of self-sufficiency and a ***low*** love-of-money orientation (Tang and Chiu 2003). They are subject to the pressure and opportunity in the environment, fall into temptations (Baumeister 2002), and become corrupt. Although most people may expect that bad apples with high love-of-money orientation have high corrupt intent, we explore a counterintuitive hypothesis: Bad apples may report low corrupt intent because they may deny any wrongdoing. They take corruption for granted, act like they are "the king of the hills", treat corruption as an "entitlement" (Levine 2005), or "profit sharing" due to their critical roles as stake holders of all business. Since ethical values have very little power, if any, to curb unethical behavior in a state of anarchy (Sardžoska and Tang 2009; Tang et al. 2011b, c), we predict that favorable work environment (subjective norm) may curb corrupt intent for *good* apples only, but not for *bad* apples because the latter wants to have more money and continues to *abuse* their position and power. To these bad apples, money is a powerful, addictive, insatiable drug—the more money they have, the more they want it (Lea and Webley 2006). Thus, managers' character (good versus bad apples) serves as a moderator.

### *Public Versus Private*

Employees in the public sectors are notoriously underpaid compared to those in the private sectors. People with financial hardship are obsessed with money (Lim and Teo 1997). Low salaries force public servants to supplement their incomes illicitly (Lambsdorff 1999). Serious corruptions exist in transition economies, such as Russia and Ukraine (McCarthy and Puffer 2008; Vynoslavaska et al. 2005). Research shows that in Ukraine, for example, public sector employees received 24–32% less wages than their private sector counterparts but both sectors had essentially identical level of consumer expenditures (Gorodnichenko and Peter 2007). Bribery accounted for at least 20% of the total wage compensation in the public sector which was equivalent to US$460–580 million, or .9–1.2% of Ukraine's GDP in 2003. There are more bad apples and corruption in the public sectors than in the private sectors (Sardžoska and Tang 2009). We argue: Bad apples in the public sectors have more corruption than those in the private sectors. A favorable work environment is more effective in discouraging corrupt intent for managers in the public sectors due to their low (official) income (see discussion on income below), but high social visibility and power than for those in the private sectors.

### *Income*

In a recent cross-cultural study involving 31 entities around the world, Tang et al. (2011c) show that managers with *high* pay satisfaction in the most corrupted (low CPI) countries/entities have the highest magnitude of corrupt intent; whereas those with high pay satisfaction in the least corrupted (high CPI) countries have the lowest. High income and high CPI may curb corrupt intent. According to the justice literature, underpaid people may steal in the name of injustice (Greenberg 1993). Based on an exchange theory, the utility of money and self-esteem can compensate each other: Money, as a tool, enhances self-esteem (Zhang 2009). Low-income people have low self-sufficiency (Vohs et al. 2006), low self-esteem, and low internal locus of control, and are thus highly subject to the impact of work environment (Tang and Sarsfield-Baldwin 1991; Tang et al. 1987, 2000). Low self-esteem people are more behavioral plastic and are easily influenced, manipulated, or molded by external factors (Brockner 1988; Tang and Reynolds 1993). We predict that a favorable work

[1] The Matthew Effect: To anyone who has, more will be given and he will grow rich; from anyone who has not, even what he has will be taken away (Matthew 13: 12).

environment curbs corrupt intent for people with low income, but not for those with high income.

*Gender (Male Versus Female)*

Males score high on Machiavellianism (Christie and Geis 1970), have higher career advancement concerns, and are more likely to engage in unfair practices than females (Malinowski and Berger 1996). Female managers are more ethical than their male counterparts (Deshpande 1997). Ethics training has limited effect for females but no effect for males (Ritter 2006). An indirect path (LOM → Machiavellianism → unethical behavior) exists for male students but not for female students and for male business students but not for female business students (Tang and Chen 2008). Gender is a moderator. We combine our theoretical model and all moderators and propose our specific hypotheses below:

**Hypothesis 1a** The LOM is directly related to corrupt intent (Fig. 1, Path 5) and indirectly related to corrupt intent through job satisfaction (Path 1 and Path 4).

**Hypothesis 1b** Bad apples' high LOM is associated with low corruption (Path 5).

**Hypothesis 2** The use of high coping strategies is related to high job satisfaction (Path 2).

**Hypothesis 3** Favorable work environment is associated with high job satisfaction (Path 3).

**Hypothesis 4a** Favorable work environment is related to low corrupt intent (Path 7) for good apples, but not for bad apples.

**Hypothesis 4b** Favorable work environment is associated with low corrupt intent (Path 7) for people with low income, but not for those with high income.

**Hypothesis 4c** Favorable work environment is related to low corrupt intent (Path 7) for people in the public sectors, but not for those in the private sectors.

## Method

### Procedure and Sample

The English questionnaire was translated to the local language following the multi-stage translation-back-translation procedure (Brislin 1980). We collected convenience data from 23 organizations throughout Macedonia from 2001 to 2004. Participants were executives, middle- and lower-level managers, and employees of 13 large private organizations in telecommunication, banking, transportation, and food production ($n = 208$), and nine (9) public organizations in electric energy production, textile, electronic-equipment production, and education (school/college) ($n = 307$). Among these 23 organizations, 15 were in service, while 8 were in production.

### Measures

Both the LOM Scale (Tang et al. 2004) and the PUB (Sardžoska and Tang 2009) have been used in the Macedonian context. We adopted the 4-factor, 12-item LOM Scale (Tang and Chen 2008; Tang and Chiu 2003), the 20-item intrinsic and extrinsic job satisfaction measure (Weiss et al. 1967), the 48-item CRI (Moos 1993, 1995; Moos et al. 1990), the 90-item, 3-dimension WES (Moos 1994), and the 7-item Work-Related Corrupt Intent Scale (Tang et al. 2011b, c), a subset of the 12-item, 4-factor PUB (Tang and Tang 2010). Appendix 1 shows all the items of LOM and Work-Related Corrupt Intent. We used a five-point Likert Scale with *strongly disagree* (1), *neutral* (3), and *strongly agree* (5) as anchors for LOM and *very dissatisfied* (1), *neutral* (3), and *very satisfied* (5) as anchors for the job satisfaction. Here are some sample items of intrinsic satisfaction (being able to keep busy all the time, the chance to work alone on the job) and extrinsic satisfaction (the way my job provides for steady employment, my pay, and the amount of work I do). For the Work-Related Corrupt Intent measure, participants were asked to rate all the statement using the following 5-point scale with *very low probability* (1), *neutral* (3), and *very high probability* (5) as anchors. If you were given the opportunity in your work environment, what is the probability that you may engage in the following activities (see Appendix 1)?

The 48-item CRI (Moos 1993) has eight constructs. The "approach" strategy consists of (1) logical analysis, (2) positive reappraisal, (3) seek guidance/support, and (4) problem solving and the "avoidance" strategy has (1) cognitive avoidance, (2) resigned acceptance, (3) seek alternative rewards, and (4) emotional discharge. The first two constructs in each domain reflect *cognitive* coping efforts, whereas the second two reflect *behavioral* coping efforts. There are six items for each construct with the highest possible score of 18. Here are two sample questions: Did you think of different ways to deal with the problem? Did you tell yourself things to make yourself feel better? There are four response patterns: not at all (N) (0), once or twice (O) (1), sometimes (S) (2), and fairly often (F) (3). Researchers use a scoring key to identify a total score for these eight constructs. The maximum average score is 3.

The 90-item WES (Moos 1994) has three dimensions and 10 constructs: (1) relationship—involvement, peer cohesion, and supervisor support, (2) personal growth or goal orientation—autonomy, task orientation, and work

pressure, and (3) system maintenance and system change—clarity, control, innovation, and physical comfort. There are nine items for each construct with the highest possible score of 9. Here are some sample items: The work is really challenging. People go out of their way to help a new employee feel comfortable. Participants are asked to select "true" or "false" for each item. Researchers use a scoring key to calculate a total score for each of these ten constructs.

We also obtained participants' ($N = 515$) demographic variables: gender (male, $n = 222$, versus female, $n = 278$), sector (public, $n = 307$, versus private, $n = 208$), and income (high ($z$ income $\geq 0$), $n = 126$, versus low ($z$ income $< 0$), $n = 389$). Table 1 shows the mean, standard deviation, correlation, and Cronbach's α of major measures for the whole sample. Participants completed the survey voluntarily and anonymously. Participants were, on average, 39 years old with 13.6 years of education. Managers' income (US $3834.11, private = $4748.67 versus public = $3404.60) was higher than the 2005 GDP per capita ($2,810).

### Data Analysis

We consider a measure with a good fit if our results pass four of the following five criteria: (1) $\chi^2/df < 5$, (2) incremental fit index, IFI > .90, (3) Tucker-Lewis Index, TLI > .90, (4) comparative fit index, CFI > .90, (5) root mean square error of approximation, RMSEA < .10. RMSEA tends to over-reject a true model due to "small sample size" and "model complexity" (Tang et al. 2006a, p. 446; Tang and Austin 2009). Therefore, in order to maintain a good sample size to item ratio and reduce model complexity for the whole sample and subsequent analyses across subgroups of several variables, we established a parsimonious model (Fig. 1) using 16 parcels instead of 177 individual items. The sample size to item ratio was 32 (515/16 = 32.19). The major constructs (parcels) are listed as follows: LOM (Rich, Motivator, Importance, and Power), Job Satisfaction (Intrinsic and Extrinsic), CRI (Behavioral Avoidance, Behavioral Approach, Cognitive Approach, and Cognitive Avoidance), and Work Environment Scale (WES) (Relationship, Personal Growth or Goal Orientation, and System Maintenance and System Change). There are three parcels for the Work-Related Corrupt Intent measure.

We incorporated the reliability of each parcel (Factor Rich: Cronbach's $\alpha = .82$). In our Structural Equation Modeling (SEM) model, the path from the LOM construct to its measured variable (Factor Rich), .906, equals the square root of the reliability of the measured variable (.820), while the amount of random error to the measured variable (Factor Rich) is the quantity one minus the reliability (.180 = 1 − .820). We prepared our model for all variables using this procedure and presented results of our SEM model in Table 3 (Model 6) and Fig. 2 for the whole sample and in subsequent multiple-group analyses (Table 3, Models 7–10; Figs. 3, 4, 5, 6).

## Results

### Descriptive Statistics

Table 1 shows the mean, standard deviation, Cronbach's α, and correlations of all variables. The average score of

**Table 1** Means, standard deviations, correlations, and Cronbach's alphas of major variables for the whole sample

| Variable | *M* | SD | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. Sex | .56 | .52 | | | | | | | | | | | |
| 2. Age | 38.85 | 10.31 | −.15** | | | | | | | | | | |
| 3. Education | 13.60 | 1.74 | .01 | .01 | | | | | | | | | |
| 4. Income | 3834.11 | 2869.51 | −.07 | .12* | .16** | | | | | | | | |
| 5. Public/private | .60 | .49 | .02 | .32** | .06 | −.22** | | | | | | | |
| 6. Good/bad | .77 | .42 | .07 | −.10* | .04 | −.01 | −.07 | | | | | | |
| 7. LOM | 3.77 | .61 | −.08 | .05 | .01 | .02 | .07 | .00 | (.84) | | | | |
| 8. Job satisfaction | 3.34 | .99 | .02 | −.10* | .07 | .12* | −.30** | .06 | −.01 | (.88) | | | |
| 9. Coping | 2.52 | .42 | .09 | −.10* | .02 | −.11* | −.01 | −.03 | .07 | .02 | (.89) | | |
| 10. Work environment | 5.10 | 1.23 | .11* | −.06 | −.01 | .07 | −.21** | .04 | −.09 | .45** | −.07 | (.70) | |
| 11. Corrupt intent | 1.31 | .55 | −.11* | .03 | −.01 | −.09 | .06 | −.26** | .04 | −.05 | −.03 | −.13** | (.85) |

Sample size: whole sample—$N = 515$; public = 1 (% public, $n = 307$), private = 0 ($n = 208$); sex: female = 1 (% female, $n = 278$), male = 0 ($n = 222$); good apple = 1 ($n = 398$), bad apple = 0 ($n = 117$); income: high ($n = 126$), low ($n = 389$). Age is expressed in years. Income = US$. The LOM (12 items), intrinsic and extrinsic job satisfaction (20 items), CRI (48 items), WES (90 items, true/false), and corrupt intent (7 items, 5-point Likert-type rating scales). Cronbach's α is presented in parentheses

* $p < .05$, ** $p < .01$

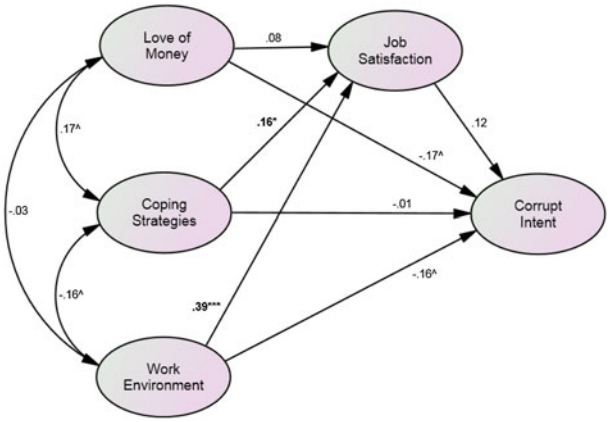


**Fig. 2** Results of our theoretical model (the whole sample). *Note*: $\chi^2 = 138.41$, df = 102, $p = .0096$, $\chi^2/df = 1.36$, IFI = .96, TLI = .95, CFI = .97, RMSEA = .04. ^$p < .10$, *$p < .05$, **$p < .01$, ***$p < .001$

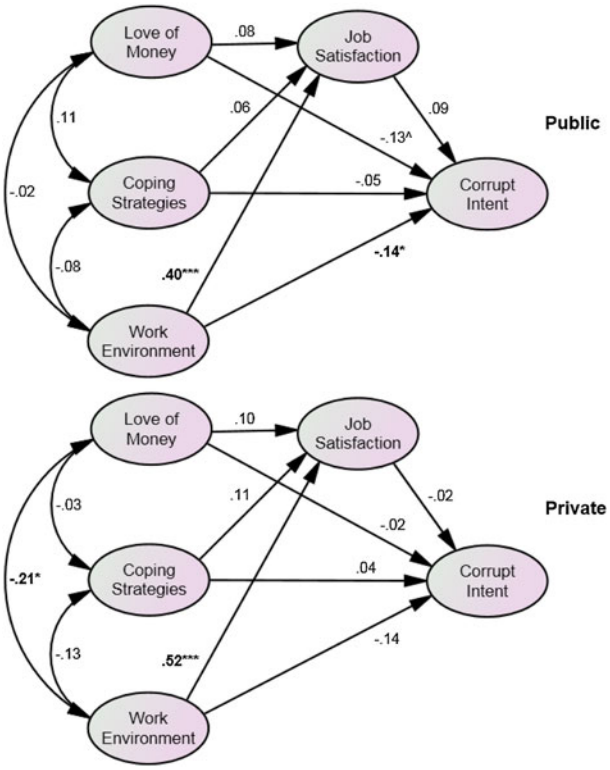


**Fig. 3** Results of our theoretical model (public versus private). *Note*: $\chi^2 = 334.78$, df = 204, $p = .0000$, $\chi^2/df = 1.64$, IFI = .95, TLI = .93, CFI = .95, RMSEA = .04. ^$p < .10$, *$p < .05$, **$p < .01$, ***$p < .001$

corrupt intent was relatively low (1.31 on a 5-point scale) in this Macedonian sample. Females were younger than their male counterparts. Older people, individuals with higher education, private sectors employees, people with high job satisfaction, and those with low coping strategies

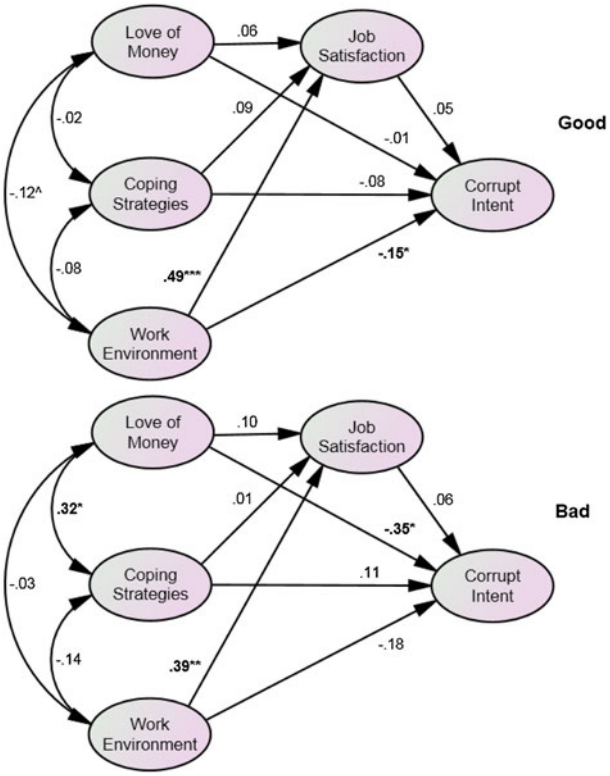


**Fig. 4** Results of our theoretical model (good apples versus bad apples). *Note*: $\chi^2 = 382.82$, df = 204, $p = .0000$, $\chi^2/df = 1.88$, IFI = .93, TLI = .91, CFI = .93, RMSEA = .04. ^$p < .10$, *$p < .05$, **$p < .01$, ***$p < .001$

were related to high income. People in the public sectors were older and had lower income than those in the private sectors. Good apples were younger than bad apples. Younger people, high income individuals, people in the private sectors, and people with favorable environment had high job satisfaction. Young and low-income people used more coping strategies. Females, employees in the private sectors, people with high job satisfaction, and those with low corrupt intent had favorable work environment. Finally, males, bad apples, and an unfavorable work environment were associated with high corrupt intent.

## Step 1: Measurement Model

Due to the large number of items, we investigated each measure individually in this study. For example, we established a measurement model for the 12-item, 4-factor LOM Scale and found a good fit between our model and our data ($\chi^2 = 66.92$, df = 42, $p = .0086$, $\chi^2/df = 1.59$, IFI = .99, TLI = .98, CFI = .99, RMSEA = .03). All items of the LOM Scale, the four first-order latent variables (Rich, Motivator, Importance, and Power), the second-order latent variable (the LOM), the factor loadings for items and the first-order variables, and Cronbach's $\alpha$ for the whole scale

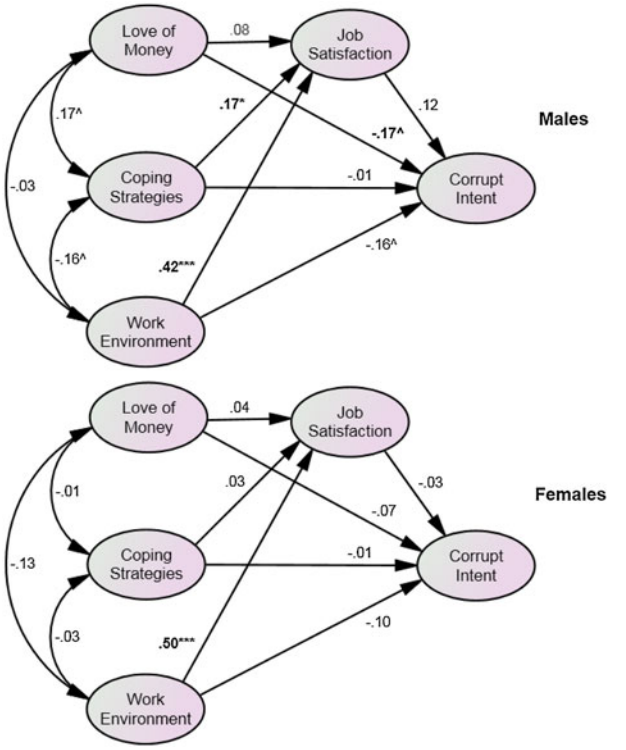


**Fig. 5** Results of our theoretical model (males versus females). *Note*: $\chi^2 = 352.48$, df = 204, $p = .0000$, $\chi^2/df = 1.73$, IFI = .94, TLI = .93, CFI = .94, RMSEA = .04. ^$p < .10$, *$p < .05$, **$p < .01$, ***$p < .001$

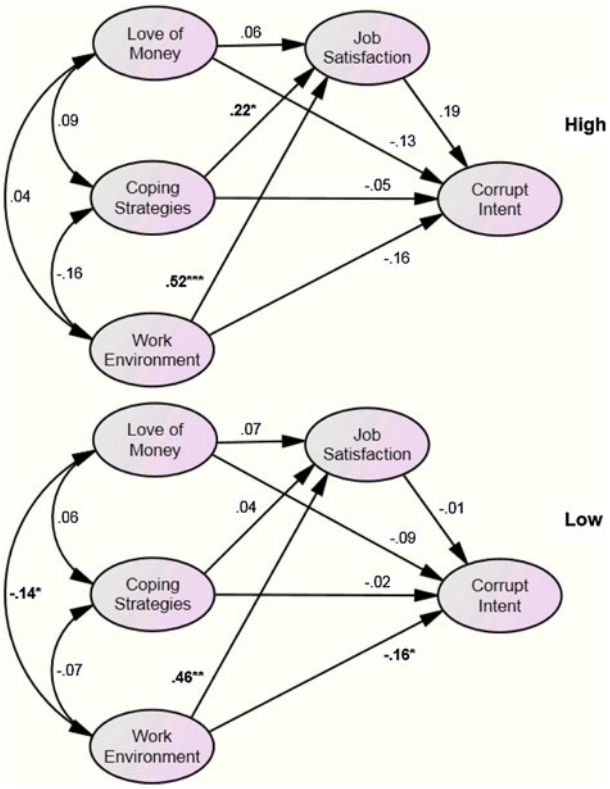


**Fig. 6** Results of our theoretical model (high income versus low income). *Note*: $\chi^2 = 369.94$, df = 204, $p = .0000$, $\chi^2/df = 1.81$, IFI = .94, TLI = .92, CFI = .94, RMSEA = .04. ^$p < .10$, *$p < .05$, **$p < .01$, ***$p < .001$

and the factors are presented in Appendix 1. Following the same procedure, we also presented our results regarding Work-Related Corrupt Intent Scale in Appendix 1. Table 2 shows our confirmatory factor analyses (CFA) results for all measures. Since the CRI (Moos 1993, 1995) has 48 items and WES has 90 items, we calculated the average scores for the eight and three major dimensions or sub-constructs for these measures, respectively, in our "reflective" measurement models (MacKenzie et al. 2011).

For the LOM Scale, Factor Rich had the highest factor loading (.80) that was followed by Motivator (.77), Power (.71), and Important (.60). For the CRI, we listed the factor loadings as follows: Behavioral Avoidance (.81), Behavioral Approach (.68), Cognitive Approach (.63), and Cognitive Avoidance (.62). For the WES, the factor loadings were as follows (descending): Relationship (.78), System Maintenance and System Change (.76), and Personal Growth or Goal Orientation (.63). Table 2 suggests that our measures passed all the criteria mentioned above. With these solid measurements, we now turn to the common method variance (CMV) issue, next.

## Step 2: Common Method Variance

The CMV problem may have been overstated and reached the status of urban legend in the literature (Spector 2006). Since we had cross-sectional data collected at one time, we used Harman's one-factor test to check the CMV issue (Podsakoff et al. 2003). We employed unrotated factor solution involving 50 items in an exploratory factor analysis (EFA) (12 items of the LOM, 20 items of the Intrinsic and Extrinsic Job Satisfaction, 7 items of Corrupt Intent, 8 factors of the CRI, and 3 factors of Work Environment Scale). If CMV is a major concern, all items will fall into a single general factor. In this study, we found 11 factors with eigenvalues greater than 1 and listed scales (and the amount of variance explained; total = 62.79%) as follows: Job Satisfaction (15.39%), LOM (10.14%), Corrupt Intent (8.77%), CRI (6.11%), Work Environment Scale (4.53%), and minor factors with cross-loadings (3.75, 3.26, 2.90, 2.89, 2.64, and 2.42%). We re-analyzed the data using only 14 items (factors of all measures) and found four factors with eigenvalues greater than 1 (total = 62.16%): Work Environment Scale (20.76%), CRI (18.02%), the LOM (15.21%), and Job Satisfaction and Corrupt Intent (8.17%). WES used the true/false format and required a scoring key to calculate the scores. We have attempted to avoid the CMV bias in our research (Podsakoff et al. 2003) using different response formats. In addition, our Table 1 shows

**Table 2** Main results of our measures and theoretical model

| Model | $\chi^2$ | df | $p$ | $\chi^2$/df | IFI | TLI | CFI | RMSEA |
|---|---|---|---|---|---|---|---|---|
| Measurement model | | | | | | | | |
| 1. The LOM | 10.16 | 7 | .1794 | 1.45 | .99 | .99 | .99 | .03 |
| 2. Intrinsic and extrinsic job satisfaction | 446.46 | 148 | .0000 | 3.02 | .92 | .88 | .91 | .06 |
| 3. CRI | 3.30 | 2 | .1911 | 1.65 | .99 | .99 | .99 | .04 |
| 4. WES | 9.66 | 2 | .0080 | 4.83 | .98 | .95 | .98 | .09 |
| 5. Corrupt intent | 10.16 | 7 | .1794 | 1.45 | .99 | .99 | .99 | .03 |
| SEM model | | | | | | | | |
| 6. The whole sample | 138.41 | 102 | .0096 | 1.36 | .96 | .95 | .97 | .04 |
| 7. Sector (public versus private) | 334.78 | 204 | .0000 | 1.64 | .95 | .93 | .95 | .04 |
| 8. Character (good versus bad) | 382.82 | 204 | .0000 | 1.88 | .93 | .91 | .93 | .04 |
| 9. Gender (male versus female) | 352.48 | 204 | .0000 | 1.73 | .94 | .93 | .94 | .04 |
| 10. Income (high versus low) | 369.94 | 204 | .0000 | 1.81 | .94 | .92 | .94 | .04 |

$N = 515$

low correlations among variables. Our results further confirmed that the concern for CMV was not warranted.

Step 3: Structural Equation Modeling Results

*The Whole Sample*

Our results showed that people with good coping strategies had high intrinsic and extrinsic job satisfaction (Fig. 2, Path 2 = .16, $p < .01$), and favorable work environment was related to high intrinsic and extrinsic job satisfaction (Path 3 = .39, $p < .001$), supporting Hypotheses 2 and 3, respectively. Path 5 and Path 7 approached significance ($p < .10$). The correlations between LOM and coping strategies (.17) and between coping strategies and work environment (−.16) were not significant ($p < .10$).

*Sector (Public, n = 307 Versus Private, n = 208)*

We examined managers in the public and private sectors simultaneously in one multiple-group analysis using the same theoretical model and presented results in Table 3 and Fig. 3. Path 3 (Work Environment → Job Satisfaction) was significantly positive for managers in the public (.40) and the private (.52) sectors, supporting Hypothesis 3. Path 7 (Work Environment → Corrupt Intent) was significantly negative (−.14) for the public sectors, but non-significant (−.14) for the private sectors, supporting Hypothesis 4c. It should be noted that these paths were similar (−.14 versus −.14), but due to different sample size, a path was significant in a larger sample ($n = 307$ in the private sectors), but non-significant in a smaller one ($n = 208$ in the public sectors). A favorable environment was associated with low desire for money in the private sectors only. The correlation for managers in the public sectors was non-significant.

We investigated mean differences in demographic variables between the public sectors and the private sectors. Due to missing data, the sample sizes reported in the following analyses were smaller than those reported above. Multivariate analysis of variance (MANOVA) results showed that public sector managers were different from private sector ones ($F$ (6, 323) = 9.82, $p = .001$, Wilks' lambda = .846, partial $\eta^2 = .154$, observed power = 1.000). Box's test of equality of covariance matrices was significant (Box's $M = 3656.41$, $F = 169.97$, $p < .001$). Tests of between-subjects effects showed that public servants were older (41.92 versus 36.55 years; $F = 21.16$, $p = .001$), had longer career tenure (14.63 versus 7.78 years; $F = 34.44$, $p = .001$), and less income (US$3510.51 versus $4727.21; $F = 12.56$, $p = .001$) than managers in the private sectors.

Significant differences in attitudinal variables ($F$ (5, 480) = 11.85, $p < .001$, Wilks' lambda = .890, partial $\eta^2 = .110$, observed power = 1.00) showed that public sector managers had lower job satisfaction (public = 3.19 versus private = 3.57; $F = 50.74$, $p < .001$), less favorable perceptions of the work environment (4.89 versus 5.40; $F = 20.75$, $p < .001$), and higher corrupt intent (1.34 versus 1.24; $F = 4.54$, $p < .034$) than their private sector managers. Managers in the public sectors had slightly higher love-of-money orientation (3.82) than those in the private sectors (3.72; $F = 3.12$, $p = .078$).

*Character (Good Apples, n = 398 Versus Bad Apples, n = 117)*

We used all four factors of the PUB measure and identified good apples ($n = 398$) and bad apples ($n = 117$, 22.7%) using a cluster analysis. Path 3 of Fig. 4 (Work Environment → Job Satisfaction) was significant (.49) for

**Table 3** Total effect, direct effect, and indirect effect on dependent variables

| Endogenous dependent | Exogenous/independent variable | | | |
|---|---|---|---|---|
| | Work | Coping | LOM | Job |
| 1. Whole sample | | | | |
| Total effect | | | | |
| Job satisfaction | .393 | .165 | .077 | .000 |
| Corrupt intent | −.107 | .011 | −.160 | .124 |
| Direct effect | | | | |
| Job satisfaction | .393 | .165 | .077 | .000 |
| Corrupt intent | −.155 | −.009 | −.169 | .124 |
| Indirect effect | | | | |
| Job satisfaction | .000 | .000 | .000 | .000 |
| Corrupt intent | .049 | .020 | .010 | .000 |
| 2. Public sectors | | | | |
| Total effect | | | | |
| Job satisfaction | .398 | .060 | .079 | .000 |
| Corrupt intent | −.111 | −.045 | −.123 | .085 |
| Direct effect | | | | |
| Job satisfaction | .398 | .060 | .079 | .000 |
| Corrupt intent | −.145 | −.050 | −.130 | .085 |
| Indirect effect | | | | |
| Job satisfaction | .000 | .000 | .000 | .000 |
| Corrupt intent | .034 | .005 | .007 | .000 |
| Private sectors | | | | |
| Total effect | | | | |
| Job satisfaction | .515 | .112 | .101 | .000 |
| Corrupt intent | −.150 | .040 | −.018 | −.022 |
| Direct effect | | | | |
| Job satisfaction | .515 | .112 | .101 | .000 |
| Corrupt intent | −.138 | .042 | −.016 | −.022 |
| Indirect effect | | | | |
| Job satisfaction | .000 | .000 | .000 | .000 |
| Corrupt intent | −.011 | −.002 | −.002 | .000 |
| 3. Good apples | | | | |
| Total effect | | | | |
| Job satisfaction | .486 | .092 | .055 | .000 |
| Corrupt intent | −.127 | −.075 | −.009 | .052 |
| Direct effect | | | | |
| Job satisfaction | .486 | .092 | .055 | .000 |
| Corrupt intent | −.152 | −.080 | −.012 | .052 |
| Indirect effect | | | | |
| Job satisfaction | .000 | .000 | .000 | .000 |
| Corrupt intent | .025 | .005 | .003 | .000 |
| Bad apples | | | | |
| Total effect | | | | |
| Job satisfaction | .388 | .012 | .098 | .000 |
| Corrupt intent | −.153 | .113 | −.340 | .062 |
| Direct effect | | | | |
| Job satisfaction | .388 | .012 | .098 | .000 |
| Corrupt intent | −.177 | .113 | −.346 | .062 |
| Indirect effect | | | | |
| Job satisfaction | .000 | .000 | .000 | .000 |
| Corrupt intent | .024 | .001 | .006 | .000 |
| 4. Males | | | | |
| Total effect | | | | |
| Job satisfaction | .424 | .171 | .078 | .000 |
| Corrupt intent | −.107 | .013 | −.157 | .119 |
| Direct effect | | | | |
| Job satisfaction | .424 | .171 | .078 | .000 |
| Corrupt intent | −.158 | −.007 | −.167 | .119 |
| Indirect effect | | | | |
| Job satisfaction | .000 | .000 | .000 | .000 |
| Corrupt intent | .050 | .020 | .009 | .000 |
| Females | | | | |
| Total effect | | | | |
| Job satisfaction | .498 | .029 | .045 | .000 |
| Corrupt intent | −.121 | −.008 | −.073 | −.035 |
| Direct effect | | | | |
| Job satisfaction | .498 | .029 | .045 | .000 |
| Corrupt intent | −.103 | −.007 | −.071 | −.035 |
| Indirect effect | | | | |
| Job satisfaction | .000 | .000 | .000 | .000 |
| Corrupt intent | −.017 | −.001 | −.002 | .000 |
| 5. High income | | | | |
| Total effect | | | | |
| Job satisfaction | .517 | .224 | .063 | .000 |
| Corrupt intent | −.062 | −.011 | −.120 | .194 |
| Direct effect | | | | |
| Job satisfaction | .517 | .224 | .063 | .000 |
| Corrupt intent | −.163 | −.054 | −.132 | .194 |
| Indirect effect | | | | |
| Job satisfaction | .000 | .000 | .000 | .000 |
| Corrupt intent | .100 | .044 | .012 | .000 |
| Low income | | | | |
| Total effect | | | | |
| Job satisfaction | .461 | .040 | .067 | .000 |
| Corrupt intent | −.162 | −.022 | −.090 | −.008 |
| Direct effect | | | | |
| Job satisfaction | .461 | .040 | .067 | .000 |
| Corrupt intent | −.158 | −.022 | −.090 | −.008 |
| Indirect effect | | | | |
| Job satisfaction | .000 | .000 | .000 | .000 |
| Corrupt intent | −.004 | .000 | −.001 | .000 |

good apples and for bad apples (.39), supporting Hypothesis 3. However, Path 7 (Work Environment → Corrupt Intent) was significant and negative (−.15) for good apples but non-significant for bad apples (−.18), supporting Hypothesis 4a. Path 5 (LOM → Corrupt Intent) was significant and negative for bad apples (−.35), but non-significant for good apples, supporting our counterintuitive Hypothesis 1b. Again, sample size contributed to these significant/non-significant findings. Bad apples' LOM was positively correlated with coping strategies. High love-of-money managers had actually low work-related corrupt intent.

The significant differences between bad apples and good apples ($F$ (6, 323) = 2.29, $p$ = .022, Wilks' lambda = .957, partial $\eta^2$ = .043, observed power = .822) suggested that bad apples had longer career tenure (15.46 versus 11.68; $F$ = 7.45, $p$ = .006) and were more dominated by males (56 versus 40%; $F$ = 6.31, $p$ = .012) than good apples. Bad apples were slightly older than good apples (42.27 versus 39.69), but the difference failed to reach significance ($F$ = 3.64, $p$ = .057). Bad apples had slightly higher income (US$3952.19) than good apples ($3873.29; the difference was negligible ($F$ = .04, $p$ = .84). There were significant differences in attitudinal variables ($F$ (5, 480) = 7.13, $p$ = .001, Wilks' lambda = .931, partial $\eta^2$ = .069, observed power = .999): The bad apples had significantly higher corrupt intent (1.55) than the good apples (1.23) ($F$ = 34.39, $p$ = .001). This finding was expected/confounded because we used the PUB measure to classify good apples and bad apples and corrupt intent was a part of the PUB measure.

*Gender (Males, n = 222 Versus Females, n = 278)*

Path 3 of Fig. 5 (Work Environment → Job Satisfaction) was significant for both males (.42) and females (.50), supporting Hypothesis 3. However, coping strategies were related to high job satisfaction (.17) for males but not for females. Path 5 (LOM → Corrupt Intent) was not significant. MANOVA results ($F$ (5, 324) = 2.27, $p$ = .048, Wilks' lambda = .966, partial $\eta^2$ = .034, observed power = .733) illustrated that males were older (41.80) than females (39.06; $F$ = 6.03, $p$ = .015). Males tended to have higher income ($4220.77) than females ($3637.53; $F$ = 3.21, $p$ = .074). There were significant differences in attitudinal variables ($F$ (5, 468) = 3.32, $p$ = .006, Wilks' lambda = .966, partial $\eta^2$ = .034, observed power = .898): Male managers had less favorable perceptions of the work environment (4.96 versus 5.20; $F$ = 4.33, $p$ = .038) and a higher level of corrupt intent (1.38 versus 1.23; $F$ = 7.44, $p$ = .007) than their female counterparts. Females tended to use more coping strategies (2.56) than their male counterparts (2.48; $F$ = 3.37, $p$ = .067).

*Income (High, n = 126 Versus Low, n = 389)*

Path 3 (Work Environment → Job Satisfaction) of Fig. 6 was significant for both high income (.52) and low income (.46) managers, supporting Hypothesis 3. Favorable work environment is correlated with low LOM for low-income people (−.14) but not for high income individuals (.04). Path 2 (Coping Strategies → Job Satisfaction) was significant for high income managers (.22), but not for low-income managers (.04). Path 7 (Work Environment → Corrupt Intent) was negatively significant (−.16) for low-income managers but not for high income managers (−.16). Again, the sample size played a role here for these findings. This important finding supported Hypothesis 4b.

Further analysis ($F$ (5, 436) = 12.39, $p$ = .001, Wilks' lambda = .876, partial $\eta^2$ = .124, observed power = 1.000) revealed that high income managers were older (42.97 versus 37.62; $F$ = 25.32, $p$ = .001) and had more education (2.12 versus 1.65; ($F$ = 26.83, $p$ = .001) than low-income managers. The high income group had slightly more males (50%) than the low-income group (41%; $F$ = 3.03, $p$ = .082). There were no overall significant differences in attitudinal variables ($F$ (5, 480) = 2.00, $p$ = .077, Wilks' lambda = .981, partial $\eta^2$ = .020, observed power = .672). High income managers used fewer coping strategies (2.45) than their low-income counterparts (2.54) ($F$ = 4.66, $p$ = .031).

*Standardized Total Effect*

Table 3 shows the standardized total effect, the direct effect, and the indirect effect from four exogenous/independent variables (work environment, coping strategies, LOM, and job satisfaction) onto two endogenous variables (job satisfaction and corrupt intent). The direct effects are the same as the paths mentioned in our Figs. 2, 3, 4, 5 and 6. The total effect is the sum of the direct effect and the indirect effect. For example, the indirect effect from work environment to corrupt intent (Work Environment → Job Satisfaction → Corrupt Intent) is the product of two paths: Path 3 and Path 4 [i.e., indirect effect (.049) = (Path 3 = .393) * (Path 4 = .124)]. The total effect of work environment to corrupt intent (−.107) equals to the sum of the direct effect (Path 7 = −.155) and the indirect effect (Path 3 * Path 4 = .049). This allows researchers to examine the standardized total effect of exogenous variables on an endogenous variable. Regardless of the *significance* of the paths, Table 3 suggests that for the whole sample, among four exogenous variables, work environment had the most significant effect on job satisfaction, *relatively speaking*. Further, the LOM was associated with less corrupt intent among Macedonian managers. This pattern of results also existed for managers in the public

sectors, bad apples, males, and high income individuals. However, for those in the private sectors, good apples, females, and low-income people, the pattern was different. A positive work environment is related to not only high job satisfaction but also low corrupt intent.

## Discussion

In this study, we test a model of work-related corrupt intent involving LOM, job satisfaction (attitude), coping strategies (perceived behavioral control), work environment (subjective norm), and work-related corrupt intent (behavioral intention). We tested this model using job satisfaction as a mediator and sector (public versus private), personal character (good apples versus bad apples), gender, and income as moderators in a sample of 515 managers in the Republic of Macedonia. For the whole sample, both favorable work environments and coping strategies are related to managers' high intrinsic and extrinsic job satisfaction, as expected. Our subsequent multiple-group analyses show that the relationship between work environment and job satisfaction is *the strongest link* for all subsequent analyses.

Our results become more interesting when we dig deeper. Among three predictors (e.g., LOM, coping strategies, and work environment), favorable work environment is associated with less LOM for employees in the private sectors and people with low income, supporting the literature that favorable work environment increases satisfaction, commitment, and performance (Kristof-Brown et al. 2005; Tang and Chiu 2003; Vancouver and Schmitt 1991). For bad apples, LOM is positively associated with coping strategies. This finding is interesting and has an important implication: High LOM people tend to take action and increase their income (Tang et al. 2000). High love-of-money people (bad apples in particular) use both cognitive and behavioral approach and avoidance strategies effectively. Future researchers may want to investigate this issue in more detail empirically.

Using different coping strategies successfully is related to high job satisfaction for male managers and those with high income. A favorable work environment is related to less corruption for managers in the public sectors, good apples, and people with low income, but not for their counterparts (those in the private sectors, bad apples, those with high income). Results from bad apples provide the most counterintuitive findings: For bad apples, LOM is related to less corrupt intent. We offer the following speculations.

On the one hand, good apples, public sector managers, and people with low income do look to the social context to determine what is ethically right and wrong (Bandura 1977), obey authority figures (Litzky et al. 2006; Milgram 1974) and laws, and do what is rewarded because organizations with supportive ethical culture and innovative work environments promote ethical behavior and performance. On the other hand, bad apples, private sector managers, and high income people may have taken the good environment for granted, hardened their hearts, and ignored the good things in the organizational context. To them, a favorable and good work environment does not significantly curb their corrupt intent. Further, many of these high love-of-money managers have worked their way up to the top of the organizational hierarchy. Due to their position, power, authority, social visibility, and opportunities, they have received high pay from working on their jobs legally and also additional financial and personal gains illegally. Bad apples with high LOM tend to abuse their position and power, and adopt all coping strategies in order to achieve their personal and selfish agenda. Anecdotal evidence suggests that many corrupted top executives and managers adopt all coping strategies, use all resources and social contacts effectively, explore possible ways to get away from getting caught for corruption, and plan their exit strategy carefully so that they may escape to another country and enjoy their wealth overseas.

Research shows that those who experience financial hardship are obsessed with money and have high LOM (Lim and Teo 1997), whereas for highly paid Hong Kong executives, high income leads to low LOM (Tang and Chiu 2003). With the presence of abundant money, some have a sense of *self-sufficiency* (Gino and Pierce 2009) and a lower level of LOM. Yet the opportunity to obtain illegal money and benefits is plentiful and available at all times. In order to maintain their life style, income, power, and benefits that come with the position, they simply reduce their resistance or moral standards concerning unethical behavior. They do not want to stop the flow of money coming their way (Badaracco 2006), so they go with the flow, fall into temptation (Baumeister 2002), and continue to become corrupt. Following this rationale, those with low LOM have high corruption.

As mentioned, Tang et al. (2011c) find a three-way cross-level interaction effect of LOM, pay satisfaction (Level 1), and CPI (Level 2) on corrupt intent. Managers with *high* pay satisfaction in the most corrupted countries/entities have the highest magnitude of corrupt intent; whereas those with high pay satisfaction in the least corrupted countries have the lowest. Bad apples have longer career tenure (15.46), are mostly male (56%), tend to be older, and have slightly higher income than good apples. In our Macedonian sample, the corrupt intent score ($M = 1.31$, SD $= .55$) was similar to that of the Tang et al. (2011c) study ($M = 1.49$, SD $= .64$). Managers with high pay satisfaction in the most corrupted countries have high corruption. We provide our theoretical, empirical, and practical implications below.

### Theoretical Contribution

Our new theoretical model provides novel, interesting, and counterintuitive results and helps us understand not only the what, how, and why factors contributing to corruption but also who, where, and when. Favorable work environment undermines corrupt intent for managers in the public sectors, good apples, and people with low income, but not for their counterparts. The former is more malleable and flexible (behavioral plastic) than the latter (Brockner 1988). For private sectors and low-income managers, favorable work environment is associated with low LOM and high job satisfaction. These findings support the equity theory: High status job title serves as compensation for underpayment (Greenberg and Ornstein 1983). High pay reduces peoples' LOM. A low level of LOM is associated with a high level of pay satisfaction. High pay satisfaction is related to low corruption (Tang and Chiu 2003). Although both favorable work environments and low LOM enhance job satisfaction, job satisfaction has no impact on corrupt intent in this study. Researchers and practitioners may incorporate additional variables, expand our theoretical models, address these important and practical issues, and identify policies and strategies to curb corruption.

### Empirical Contributions

We collected data from executives, managers, supervisors, and employees in 23 organizations throughout Macedonia, involving 13 large private organizations ($n = 208$) and nine public institutions ($n = 307$) and obtain a reasonable large sample size ($N = 515$). Our scales and measurement models have good reliabilities and psychometric properties in this sample. Researchers will have confidence in using these measures in cross-cultural studies. Our multiple-group analyses (e.g., good apples versus bad apples) contribute significantly to our theoretical model and provide practical implications.

### Practical Contributions

Favorable work environments enhance job satisfaction for all managers in the whole sample as well as all subsequent multiple-group analyses. Good work environment undermines corrupt intent for managers in the public sectors, good apples, and people with low income, but *not* for their counterparts. Researchers and practitioners should examine different components of the WES, manage relationship, personal growth or goal orientation, and system maintenance and system change effectively, and greatly enhance corporate ethical values in order to fight against corruption. Future researchers may want to test our propositions empirically.

Bad apples have longer career tenure and are mostly male than good apples. Those bad apples with high LOM tend to have high usage of coping strategies. LOM is related to less corrupt intent. Some of these bad apples have high power, authority, money, social visibility, and control of resources. The visible presence of abundant wealth provokes their high corrupt intent (Gino and Pierce 2009). To eradicate corruption, boost business ethics, and maintain sustainability in the competitive market, executives must monitor managers' money attitudes, satisfaction, firm-level pressures (Martin et al. 2007), and remove the deeply rooted temptations. They must implement organizational corruption control elements—bureaucratic control, punishment, incentive alignments, legal/regulatory sanctioning, social sanctioning, vigilance controls, self-control, and concertive controls (Lange 2008). It is also practical to rotate these top level executives to different positions/divisions in order to avoid having long-term control of power and authority, improve the work environment, valorize corporate ethical values, inspire personal integrity (Simons 2002; Simons et al. 2007; Tang and Liu 2011), and manage all stakeholders (stockholders, managers, employees, suppliers, and customers) fairly to reduce corruption and increase profits. Future research may test this proposition. On July 30, 2002, President Bush of the United Stages signed the Sarbanes–Oxley Act into law. Entities in developing and underdeveloped economies may or may not have such laws. Ethical values at the organization level may not exist in a vacuum. Coherent economic, legal, political, and social infrastructures must exist at the country/entity level.

### Limitations

We do not select these managers from the private or the public sectors in Macedonia at random. Our cross-sectional data from a single source do not provide strong cause-and-effect relationship. The CMV is negligible in this study (e.g., Podsakoff et al. 2003). Further, we measured only the propensity to engage in unethical behavior and work-related corrupt intent, not the actual unethical behavior. People's attitude, corrupt intent, and job satisfaction may be best addressed by monomethod self reports. Work-related corrupt intent may be verified in laboratory experiments in future studies (see Greenberg 1993). We do not examine issues related to the economy, unemployment rate, moral development, education levels, and religion of the region which may have a systematic impact on the results of this study. Researchers need to examine longitudinal qualitative and quantitative data to identify the sources and reasons of managers' intentions and life satisfaction in the future. Finally, a positive work environment is significantly related to high job satisfaction, but the

relationship approaches significance for low corrupt intent. Future researchers may conceptualize work environment as a potential mediator between LOM and coping strategies (as predictors) and job satisfaction and corrupt intent (as criteria). This conceptualization would raise the possibility of examining the extent to which LOM and coping strategies might be both directly and indirectly (through work milieu) related to job satisfaction and work-related corrupt intent (R. H. Moos, 2011, Pers. Commun.).

## Conclusion

We test a theoretical model in a sample of 515 managers in the Republic of Macedonia. For the whole sample, both coping strategies and a helpful work environment enhance job satisfaction. Moreover, the positive relationships between work environment and job satisfaction exist for all groups in subsequent analyses. High LOM is associated with a less favorable work environment for employees in the private sectors and people with low income and is positively associated with coping strategies for bad apples. Favorable work environments are related to less corrupt intent for those in the public sectors, good apples, and those with low income, but not for their counterparts. Bad apples' LOM is related to less corrupt intent. Coping strategies were related to high job satisfaction for males, but not for females. Our counterintuitive, novel, and original findings may offer additional theoretical, empirical, and practical contributions (Colquitt and Zapata-Phelan 2007) and further theory development, theory testing, and improved practice.

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## Appendix 1

See Table 4.

**Table 4** Items, measures, factor loadings, and Cronbach's alphas for the LOM Scale and Corrupt Intent Scale

| Item | Cronbach's α | | Factor loading | |
|---|---|---|---|---|
| | Scale | Factor | Factor | Item |
| The LOM Scale | .83 | | | |
| Factor Rich | | .82 | .80 | |
| 1. I want to be rich | | | | .84 |
| 2. It would be nice to be rich | | | | .69 |
| 3. Having a lot of money (being rich) is good | | | | .67 |
| Factor Motivator | | .83 | .77 | |
| 4. I am motivated to work hard for money | | | | .85 |
| 5. Money reinforces me to work harder | | | | .80 |
| 6. I am highly motivated by money | | | | .77 |
| Factor Important | | .70 | .60 | |
| 7. Money is good | | | | .65 |
| 8. Money is important | | | | .73 |
| 9. Money is valuable | | | | .53 |
| Factor Power | | .62 | .71 | |
| 10. Money is power | | | | .46 |
| 11. Money gives one considerable power | | | | .73 |
| 12. Money can buy the best products and services | | | | .50 |
| Work-Related Corrupt Intent Scale | | .85 | | |
| 1. Abuse the company expense accounts and falsify accounting records | | | | .63 |
| 2. Overcharge customers to increase sales and to earn higher bonus | | | | .61 |
| 3. Take merchandise and/or cash home | | | | .55 |
| 4. Accept money, gift, and kickback from others | | | | .53 |
| 5. Reveal company secrets when a person offers several million dollars | | | | .64 |
| 6. Sabotage the company to get even due to unfair treatment | | | | .88 |
| 7. Lay off employees to save the company money and increase personal bonus | | | | .92 |

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