

Article

Exploring the Link between Academic Dishonesty and Economic Delinquency: A Partial Least Squares Path Modeling Approach

Elena Druică ^{1,*}, Călin Vălsan ², Rodica Ianole-Călin ¹, Răzvan Mihail-Papuc ¹ and Irena Munteanu ³

¹ Faculty of Business and Administration, University of Bucharest, 030018 Bucharest, Romania; rodica.ianole@faa.unibuc.ro (R.I.-C.) razvanmihail.papuc@faa.unibuc.ro (R.M.-P.)

² Williams School of Business, Bishop's University, Sherbrooke, QC J1M1Z7, Canada; cvalsan@ubishops.ca

³ Faculty of Economic Sciences, Ovidius University, 900470 Constanta, Romania; irena.munteanu@365.univ-ovidius.ro

* Correspondence: elena.druica@faa.unibuc.ro

Received: 13 November 2019; Accepted: 11 December 2019; Published: 15 December 2019



Abstract: This paper advances the study of the relationship between the attitude towards academic dishonesty and other types of dishonest and even fraudulent behavior, such as tax evasion and piracy. It proposes a model in which the attitudes towards two types of cheating and fraud are systematically analyzed in connection with a complex set of latent construct determinants and control variables. It attempts to predict the tolerance towards tax evasion and social insurance fraud and piracy, using academic cheating as the main predictor. The proposed model surveys 504 student respondents, uses a partial least squares—path modeling analysis, and employs two subsets of latent constructs to account for context and disposition. The relationship between the outcome variable and the subset of predictors that account for context is mediated by yet another latent construct—Preoccupation about Money—that has been shown to strongly influence people's attitude towards a whole range of social and economic behaviors. The results show academic dishonesty is a statistically significant predictor of an entire range of unethical and fraudulent behavior acceptance, and confirm the role played by both contextual and dispositional variables; moreover, they show that dispositional and contextual variables tend to be segregated according to how they impact the outcome. They also show that money priming does not act as a mediator, in spite of its stand-alone impact on the outcome variables. The most important result, however, is that the effect size of the main predictor is large. The contribution of this paper is two-fold: it advances a line of research previously sidestepped, and it proposes a comprehensive and robust model with a view to establish a hierarchy of significance and effect size in predicting deviance and fraud. Most of all, this research highlights the central role played by academic dishonesty in predicting the acceptance of any type of dishonest behavior, be it in the workplace, at home, or when discharging one's responsibilities as a citizen. The results presented here give important clues as to where to start intervening in order to discourage the acceptance of deviance and fraud. Educators, university professors, and academic administrators should be at the forefront of targeted campaigns and policies aimed at fighting and reducing academic dishonesty.

Keywords: academic cheating; tax evasion; informality

1. Introduction

Academic cheating and workplace cheating are like two peas in a pod. Those who engage in dishonest behavior during university are more likely to lie, cheat, and steal later on during their

professional career [1,2]. These findings echo the widely-held belief that early cheating in school and university is a good predictor of dishonesty in the workplace later on. The relationship among academic dishonesty, workplace unethical behavior, and integrity standards is well documented [3].

If people cheat in school, and they cheat later on, at work, why would dishonesty, fraud, and cheating stop there? It makes sense to assume that once people become accustomed to disrespecting academic integrity, they might show lack of integrity in every aspect of their lives, be it at work, at home, or in public. However, there is very little academic research in this direction. This issue has received little attention and the evidence is still sketchy. This paper takes the relationship between the attitude towards academic dishonesty and other types of dishonest and even fraudulent behavior one step further. It proposes a study in which the attitudes towards two types of cheating and fraud are systematically analyzed in connection with a complex set of latent construct determinants and control variables. It attempts to predict the tolerance towards tax evasion and social insurance fraud, and piracy using academic cheating as the main predictor. The proposed model uses a subset of latent constructs that account for context, and another subset to account for disposition. The relationship between the outcome variable and the subset of predictors that account for context is mediated by yet another latent construct—Preoccupation about Money—that has been shown to strongly influence people's attitude towards a whole range of social and economic behaviors.

The contribution of this paper is two-fold: it advances a line of research previously sidestepped, and it proposes a comprehensive and robust model with a view to establishing a hierarchy of significance and effect size in predicting deviance and fraud. As it will be shown here, it turns out that the significance and the effect size of the main predictor, i.e., academic dishonesty, is huge compared with the rest of the other predictors.

Our results have theoretical as well as practical implications. The results confirm the role played by both contextual and dispositional variables; moreover, they show that dispositional and contextual variables tend to be segregated according to how they impact the outcome [3]. They also show that money priming does not act as a mediator in spite of its stand-alone impact on the outcome variables. Most of all, they buttress the important role played by academic dishonesty in predicting the acceptance of any type of dishonest behavior, be it in the workplace, at home, or when discharging one's responsibilities as a citizen.

The results presented here give important clues as to where to start intervening in order to discourage the acceptance of deviance and fraud. By far, the first choice should be tackling the issue of academic dishonesty. There is a respectable body of evidence showing that ethical education and moral sensitivity training tend to work in lowering the acceptance and incidence of academic cheating [2,4,5]. Educators, university professors, and academic administrators should be at the forefront of targeted campaigns and policies aimed at fighting and reducing academic dishonesty.

A word of caution is in order: the results show where to direct the intervention in order to reduce the acceptance of unethical behavior and fraud. The unambiguous course of action is to tackle academic dishonesty, but the findings do not illuminate the manner in which this should be done, which is a different matter altogether and not the subject of the current paper.

The paper is organized as follows. The next section discusses the literature, while Section three presents the sample of respondents and the methodology used to construct the latent variables. Section four presents the results of the partial least squares – path model (PLS-PM henceforth). Section five provides a brief discussion and interpretation of the findings. Section 6 concludes the paper.

2. Literature Review

It is truly worrisome that academic cheating is more prevalent than most people think. It seems that almost all university students have engaged in or witnessed academic dishonesty at some point during their studies [6,7]. There are many studies using a diverse methodology, including but not limited to surveys, factor analysis, structural equation modelling, and cross-lagged regressions, which

show how truly widespread academic cheating is. They also show how academic cheating is linked to workplace cheating. Nursing students cheat in large proportion [8–10]; engineering students cheat [11]; psychology students cheat [12]; IT students cheat [13]; and business students seem to outdo everyone else; they have the worst reputation for academic integrity standards among all other students [14–16]

More recently, other researchers [17] found that personality traits defined according to the reinforcement sensitivity theory (RST) are predictors for the extent to which individuals engage in academic dishonesty. Among these predictors, impulsivity and Fight–Flight–Freeze behaviors appear to play an important role.

Other authors [18] administered the Academic Honesty Scale, the Brief Self-Control Scale, the Social Success Index, the Normalcy Feeling Scale, the Social Comparison Scale, and the Satisfaction With Life Scale to a sample of 631 Polish respondents, and found self-regulation to be inversely related to academic cheating. The study also found a gender gap when engaging in academic cheating. Moreover, social comparison appears to be directly related to plagiarism.

Yet, in other cases [19] the investigation was based on a cross-lagged model to describe a complex dynamic between academic cheating on the one hand, and regulatory self-efficacy and moral disengagement on the other hand. The authors found a negative relationship between academic cheating and regulatory self-efficacy, and a positive relationship between academic cheating and moral disengagement. The results are not surprising; moral disengagement encourages academic dishonesty, which in turn legitimizes a shift in attitudes towards cheating. This repositioning leads to an increasing acceptance of cheating as a normal state of affairs.

Using a survey of 185 faculty and 295 students, other authors found a significant difference in perception and attitudes between students and faculty when it comes to assessing the consequences and implication of academic dishonesty [20].

There is a rich literature on the link between academic cheating and workplace deviance. However, there are almost no studies linking academic cheating to economic delinquency beyond the workplace. In [21], the authors argue that individuals who are more tolerant of academic dishonesty also tend to be less reliable, engage in risky behaviors, and accept more readily illegal behaviors. They are also among the very few who link academic dishonesty to dishonesty in politics, athletics, and even tax evasion [22]. This current paper differs from previous research because it takes over where [22] left, and concentrates on tax evasion and piracy, using a well-rounded system of predictors, among which academic cheating represents the most important element.

3. Materials and Methods

The data consists of 504 respondents aged 18–25 (mean 19.82, SD = 1.55), all of whom are students from various national university centers. The distribution is 74.2% females and 25.8% males, with 71.3% originating from urban areas and 28.7% from rural areas. The data was collected via an online questionnaire applied between March and April 2019. Participation in the study was voluntarily.

There are two versions of the same variance-based, structural equation model. There are eight latent variables, and four observed variables. The difference between the two models is in the outcome variable. The first version uses tax evasion and social insurance fraud acceptance as the outcome, while the second version uses piracy acceptance as the outcome. Both versions of the model have ten predictors and one mediator variable.

The items used in the measurement of tax evasion, social insurance fraud, and piracy are taken from a survey on attitudes and behavior towards tax evasion and compliance implemented in Ireland in 2008/2009 by the Office of the Revenue Commissioners (the government body responsible for tax administration and customs regime) [23]. The original survey question contained 14 items, but following an exploratory factor analysis, only six items were retained, as shown in Table 1.

Table 1. Six questionnaire items and two latent (outcome) variables: tax evasion & social insurance fraud acceptance, and piracy acceptance.

Items [23]		Dimension
ATT1	To claim credits or tax/payment reliefs that you are not entitled to	Tax Evasion and Social Insurance Fraud Acceptance (TESIFA)
ATT2	To deliberately not pay the taxes you are supposed to pay	
ATT3	To deliberately claim state social benefits that you are not entitled to	
ATT4	To knowingly buy counterfeit goods (e.g., clothing, handbags)	Piracy Acceptance (PA)
ATT5	To knowingly buy pirated goods (e.g., books, CDs, DVDs)	
ATT6	To use a computer software without having a valid license for it	

The attitude toward money scale developed by Lim and Teo [24] is used to extract the first of the four observed predictors: “I believe that a person’s pay is related to their ability and effort”, is deemed as “fairness” (FAIR). The second observed predictor is taken from the money scale developed by Yamauchi and Templer [25]. The item is part of a broader measure of power, but here, “money makes people respect you” is assigned to a variable deemed “money as social status” (MASS). It can be argued that a stronger belief in fairness would result in a weaker acceptance of any deviant or fraudulent behavior [26]. On the other hand, one expects that a greater need to express social status through a display of wealth is associated with more cynicism, a stronger sense of entitlement, and eventually more acceptance of cheating and fraudulent behavior [27]. It could even be the case that cheating becomes a compulsive behavior when driven by social status [28].

The third and fourth predictors are two latent variables called hard work as the path to achievement (HAWPACH) and valuing leisure time (VLT), adapted from Mudrack and McHoskey [29,30]. Both predictors contain items belonging to the work attitudes construct, and are taken directly from the Protestant ethics scale [31]. In the original work, the scale used to measure valuing leisure time is reversed, in an attempt to capture negative judgment against idleness [32]. Here, a 1–7 Likert scale is used, where 1 corresponds to “total disagreement”, and 7 means “total agreement,” to ensure higher scores are associated with higher valuation of leisure time (Table 2). It is expected that a strong predilection for hard work would lower the acceptance of any type of cheating or fraudulent behavior [33]. There is no prior expectation about the relationship between VLT and the two outcome variables.

Table 2. The structure of two latent variable predictors: hard work as the path to achievement (HAWPACH) and valuing leisure time (VLT).

Items from the Protestant Ethic Scale [31]		
Item	Latent Variable	Manifest Variable
WORK1	Hard Work as the Path to Achievement (HAWPACH) [30]	Any person who is able and willing to work hard has a good chance of succeeding
WORK2		If one works hard enough they are likely to make a good life for themselves
WORK3	Valuing leisure time (VLT) [30]	People should have more leisure time to spend in relaxation
WORK4		Life would be more meaningful if we had more leisure time

Academic dishonesty (ACADISH), the main predictor, is a latent variable using only two items [34]: “cheating during an exam in order to obtain a better grade” (DIS1), and “cheating during an exam in order to obtain a passing grade” (DIS2). There is a difference between these two instances stemming from the nature of the consequences. Cheating in order to obtain a passing grade seems to be perceived as more acceptable because it thwarts failure [13]. On the other hand, cheating to merely get a good grade tends to be perceived as less acceptable [35].

The model adapts the Rosenberg self-esteem scale to the context of the current survey [36–38]. The scale is one-dimensional and has 10 items. The original measurement is on a 1–4 Likert scale,

where items 2, 5, 6, 8, 9 have their scores reversed, and the total score is obtained by summing up the results of each item. Here, a 1–7 Likert scale is used (1—“total disagreement”, 7—“total agreement”). Higher scores are an indication of higher levels of self-esteem. Factor analysis reveals the presence of two latent variables labeled, “positive feelings” (POF), and “negative feelings” (NEF), presented in Table 3. The two latent variables show a negative Pearson’s correlation coefficient of 50%. While some findings suggest that the importance of self-esteem as a determinant for a wide array of behavior types has been overstated [36], POF and NEF are included in the model as two distinct dispositional control variables [39].

Table 3. Two latent predictors derived from the self-esteem scale.

Self-Esteem Scale [36]		Latent Variables—Feelings	
EST1	On the whole, I am satisfied with myself.	Positive	
EST2	At times I think I am no good at all.		Negative
EST3	I feel that I have a number of good qualities.	Positive	
EST4	I am able to do things as well as most other people.	Positive	
EST5	I feel I do not have much to be proud of.		Negative
EST6	I certainly feel useless at times.		Negative
EST7	I feel that I’m a person of worth, at least on an equal plane with others.	Positive	
EST8	I wish I could have more respect for myself.		Negative
EST9	All in all, I am inclined to feel that I am a failure.		Negative
EST10	I take a positive attitude toward myself.	Positive	

Self-efficacy (SELFEFF) is measured using the 10-item general self-efficacy scale [40]. Here, a 1–7 Likert scale is also used (1—“Not at all true”, 7—“Exactly true”). There are 10 items (SELFEFF1–SELFEFF10) resulting in a single latent variable, following an exploratory parallel analysis based on maximum likelihood extraction. Cronbach’s Alpha shows very good internal consistency at 0.92 and cannot be increased any further. The variance explained by this factor is 55.2%. Since self-efficacy is most often associated with an internal locus of control, one would expect to find a direct relationship between this latent construct and the acceptance of unethical and fraudulent behavior [41–43].

Preoccupation with money (PFM) is a latent variable predictor, based on the items presented in Table 4, and introduced as a mediator. It was extracted from the attitude toward money scale, and corresponds to one of the four dimensions found in the original study [44]. Money represents a powerful extrinsic motivator, and other studies have already found that it plays an important mediating role [45].

Money priming increases the acceptance of interactions based predominantly on market transactions at the expense of other types of social interaction. As such, money makes respondents endorse steeper hierarchical economic systems more readily. Because wealth and status are perceived as a reward for focusing on money and market transactions, money priming reduces the level of empathy and compassion towards more disadvantaged categories [27]. When reminded about money, individuals shift their frame of mind to a modus operandi in which efficiency and results take precedence over all other considerations [46].

It is expected that preoccupation with money is likely to increase the acceptance of cheating and fraudulent behavior for at least two reasons. When framed in terms of eliciting results and achieving performance measured in monetary terms, the focus of individuals is funneled towards obtaining the required results, while other contextual concerns fade into the background [47]. On the other hand, exposure to money and wealth makes people feel more entitled, and this is bound to increase the likelihood of engaging in, or more easily accepting unethical behavior [48,49].

Table 4. The latent variable “preoccupation with money”.

Item	Latent Variable	Manifest Variable
PFM1	Preoccupation with money [44]	Compared to people I know, I believe I think about money more than they do.
PFM2		I often fantasize about money and what I can do with it.
PFM3		Most of my friends have more money than I do.
PFM4		Money is the most important thing in my life.

Age represents a commonly used control variable. The segment of young adults used in the current study is relevant when exploring the relationships between money attitudes and materialism [50], and relationships among money attitudes, credit card usage, and compulsive buying [28,51,52]. Given the relatively narrow range of this observed variable, we do not expect to find a statistically significant effect. We include it, nevertheless, for the sake of following a consecrated methodology.

Gender represents another commonly used control variable. Previous research finds that money is less important for women than for men [53]; however, this finding has to be qualified by cross-cultural research, taking into account the role played by women in the financial management of the household [54]. This qualifier notwithstanding, it is expected that men are more likely to accept dishonest and fraudulent behavior than women.

Table 5 summarizes the latent variable predictors, constructed as a weighted average of their corresponding manifest variables [55]. Figure 1 presents the research model.

Table 5. A summary of latent predictors, with abbreviations and descriptors.

Latent Structure	Observed Variables
NEF	Negative feelings. Part of the self-esteem scale, the items capture negative feelings toward oneself: EST2, EST5, EST6, EST8, EST9
POF	Positive feelings. Part of the self-esteem scale, the items capture positive feelings toward oneself: EST1, EST3, EST4, EST7, EST10
HAWPACH	Hard work as the path to achievement. Hard work provides ground for success in life: WORK1, WORK2
VLT	Valuing leisure time. Appreciation for leisure time: WORK3, WORK4
ACADISH	Academic dishonesty. Motivators for academic cheating: DIS1, DIS2
SELFEFF	Self-efficacy. The level of self-efficacy: SELFEFF1–SELFEFF10
PFM	Preoccupation with money. Importance of money and fantasies around them: MON1, MON2, MON3, MON4
TESIFA	Tax evasion and social insurance fraud acceptance. The level of acceptance of active rule bending: ATT1, ATT2, ATT3
PA	Piracy acceptance. The level of piracy acceptance: ATT4, ATT5, ATT6

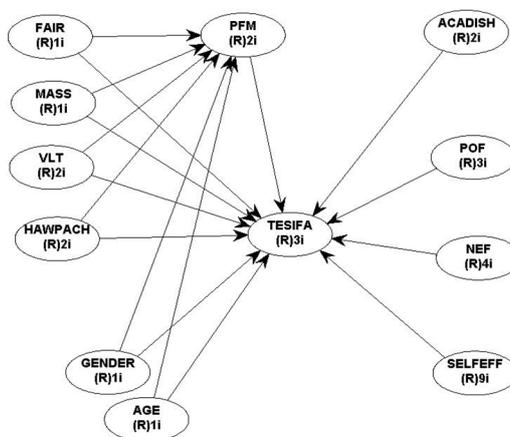


Figure 1. The research model.

Several items were subsequently dropped, either to increase internal consistency or to maintain factor loadings above 0.7. Eventually, MON3 and MON4 (preoccupation with money), EST3 and EST8 (self-esteem), and EFF2 and EFF3 (self-efficacy) were dropped from the final version of the model.

4. Results

The PLS-PM analysis is aimed at maximizing the explained variance of the dependent, endogenous latent variable [56]. The two outcome variables used here are tax evasion and social insurance fraud acceptance (TESIFA), and piracy acceptance (PA). Preoccupation with money (PFM) serves as a mediator in the relationship between contextual and dispositional constructs and the outcome variables. Academic dishonesty (ACADISH) represents the main predictor.

At its core, the estimation method is an iterative algorithm based on ordinary least squares (OLS). Any PLS-PM model consists of two parts: an outer, or measurement model, and an inner, or structural model. The outer model estimates the relationship between the latent constructs and their respective indicator manifest variables, assessed in terms of composite indices. The inner model estimates the relationships among the latent variables themselves.

One begins by estimating the model using R software version 3.4.3, with the “plspm” and the “plsdepot” packages. Subsequently, the results are cross-checked using WarpPLS software version 6.0. The statistical inference part is based on bootstrapping with 999 repetitions.

Table 6 provides the reliability results for the measurement model and shows the robustness of the measures. The composite reliability results range from 0.828 to 0.936 (self-efficacy). These values are above the threshold of 0.7 recommended in the literature [57]. Some alpha values are in the moderate range (“valuing leisure time” and “preoccupation with money”), but one might take the view that even an alpha of 0.5 or 0.6 could be acceptable, in particular when the number of scale items is small [55,58]. Also, the results are considered to be relevant when the average variance extracted (AVE) for each individual latent construct exceeds 0.50, a requirement that in this case is met across the board.

Table 6. Assessment of the measurement model.

Variable	Abbreviation	Composite Reliability (Dillon Goldstein rho)	Cronbach’s Alpha	Average Variance Extracted (AVE)
Negative feelings	NEF	0.889	0.833	0.668
Positive feelings	POF	0.897	0.827	0.743
Valuing leisure time	VLT	0.867	0.692	0.765
Hard Work as the Path to Achievement	HAWPACH	0.873	0.710	0.775
Self-efficacy	SELFEFF	0.936	0.923	0.621
Preoccupation with money	PFM	0.828	0.583	0.706
Academic Dishonesty	ACADISH	0.955	0.906	0.914
Tax Evasion and Social Insurance Fraud	TESIFA	0.883	0.824	0.654
Piracy acceptance	PA	0.851	0.736	0.656

Table 7 shows the square roots of all the AVEs (the diagonal elements of the inter-correlation matrix) to be greater than the off-diagonal elements in their corresponding rows and columns. In addition, the off-diagonal correlations are all below the threshold value of 0.8 recommended by Kennedy [59].

Table 7. Discriminant validity (inter-correlations) of variable constructs.

Variable	NEF	POF	VLT	HAWPACH	SELFEFF	PFM	ACADISHTESIFA	PA
NEF	0.817	0.593	−0.028	0.163	0.395	−0.114	−0.130	−0.272
POF		0.862	0.081	0.288	0.583	0.030	−0.021	−0.096
VLT			0.874	0.145	0.127	0.136	0.084	0.049
HAWPACH				0.881	0.347	0.031	−0.087	−0.197
SELFEFF					0.788	0.112	−0.049	−0.224
PFM						0.840	0.249	0.190
ACADISH							0.956	0.392
TESIFA								0.809
PA								0.810

Table 8 presents the loadings and cross-loadings of all manifest variables. All loadings are higher than 0.7, ranging from 0.708 to 0.874. It is easy to notice how clusters of indicators uniquely circumscribe each latent construct, with factor loadings of 0.7 or higher, and with high statistical significance ($p < 0.001$). At the same time, same-construct item loadings are higher than cross-construct loadings. This fact confirms the convergent validity of these indicators and suggests that they group into distinct latent constructs.

Table 8. Convergent validity (inter-correlations) of variable constructs.

Variable	NEF	POF	VLT	HAWPACH	SELFEFF	PFM	ACADISHTESIFA	PA
EST2	0.854	−0.034	−0.059	−0.044	−0.005	−0.032	−0.010	0.066
EST5	0.722	0.016	0.049	0.041	−0.021	−0.055	0.039	−0.008
EST6	0.851	−0.119	0.032	0.028	0.024	0.046	−0.016	0.063
EST9	0.835	0.142	−0.015	−0.019	−0.002	0.034	−0.006	−0.125
EST1	−0.099	0.865	−0.009	−0.005	−0.008	−0.037	0.000	0.034
EST7	0.033	0.856	0.027	−0.003	−0.037	0.061	0.021	−0.052
EST10	0.066	0.866	−0.017	0.007	0.044	−0.023	−0.021	0.017
WORK3	0.009	−0.035	0.874	0.049	0.009	−0.102	−0.009	0.016
WORK4	−0.009	0.035	0.874	−0.049	−0.009	0.102	0.009	−0.016
WORK1	0.006	0.026	−0.011	0.881	0.016	0.055	0.013	−0.032
WORK2	−0.006	−0.026	0.011	0.881	−0.016	−0.055	−0.013	0.032
SELFEFF1	−0.064	0.042	0.022	0.066	0.827	−0.012	0.018	−0.067
SELFEFF4	0.038	0.070	−0.004	−0.039	0.859	−0.053	0.050	0.020
SELFEFF5	0.013	0.085	−0.019	−0.093	0.805	0.116	0.034	0.009
SELFEFF6	−0.037	0.014	−0.000	0.162	0.788	0.029	−0.024	−0.034
SELFEFF7	0.099	−0.077	0.005	−0.061	0.708	−0.123	−0.104	0.081
SELFEFF8	−0.009	−0.015	0.032	−0.044	0.837	−0.066	−0.042	−0.059
SELFEFF9	−0.059	−0.060	0.012	−0.025	0.724	0.028	−0.009	−0.085
SELFEFF10	−0.003	0.009	−0.038	−0.032	0.832	0.033	0.004	0.042
MON1	−0.045	0.056	−0.071	−0.062	−0.010	0.840	0.013	0.006
MON2	0.045	−0.056	0.071	0.062	0.010	0.840	0.013	−0.006
DIS1	−0.001	0.034	0.002	0.008	−0.014	0.008	0.956	0.018
DIS2	0.001	−0.034	−0.002	−0.008	0.014	−0.008	0.956	−0.018
ATT1	0.060	−0.005	0.034	−0.059	0.032	0.054	0.107	0.823
ATT2	−0.025	−0.014	−0.031	0.074	0.010	−0.022	−0.054	0.834
ATT3	−0.008	0.011	0.015	0.049	0.002	0.037	0.008	0.780
ATT4	0.003	−0.001	0.006	−0.031	0.047	−0.046	0.098	−
ATT5	−0.001	−0.059	0.033	−0.038	−0.031	0.030	−0.065	−
ATT6	−0.002	0.053	−0.034	0.064	−0.019	0.019	−0.041	−

Table 9 presents the results for the first version of the structural model, using tax evasion and social insurance fraud as the endogenous variable. Table 10 presents the results for the second version of the structural model, using piracy as the endogenous variable.

Table 9. The results of the structural equations model—model 1.

	Direct Effects		Indirect Effects	Direct Effect Sizes (f2)		Total Effects (Direct Effect + Indirect Effect via Preoccupation for Money)
	Preoccupation for Money	TESIFA	TESIFA	Preoccupation for Money	TESIFA	PA
Preoccupation with money	–	0.100 * (0.011)			0.022	0.100 * (0.011)
FAIR	0.090 * (0.021)	0.048 (0.137)	0.009 (0.387)	0.015	0.005	0.057. (0.097)
MASS	0.353 *** (<0.001)	0.093 * (0.017)	0.035 (0.129)	0.141	0.018	0.129 ** (0.002)
HAWPACH	0.085 * (0.026)	–0.079 * (0.036)	0.009 (0.392)	0.007	0.006	–0.071. (0.054)
VLT	0.099 * (0.013)	0.058 (0.096)	0.010 (0.376)	0.014	0.016	0.068. (0.063)
Gender Male	Reference	Reference	Reference			Reference
Female	–0.128 ** (0.002)	–0.083 * (0.030)	–0.013 (0.341)	0.019	0.014	–0.096 * (0.015)
Age	0.040 (0.181)	–0.105 ** (0.008)	0.004 (0.449)	0.003	0.015	–0.101 * (0.011)
ACADISH	–	0.296 *** (<0.001)	–	–	0.119	0.296 *** (<0.001)
NEF	–	–0.164 *** (<0.001)	–	–	0.047	–0.164 *** (<0.001)
POF	–	–0.062. (0.081)	–	–	0.008	–0.062. (0.081)
SELFEFF	–	–0.191 *** (<0.001)	–	–	0.048	–0.191 *** (<0.001)
R2/Adjusted R2	20%/19%	31.8%/30.3%	–	–	–	–

Note: ***—*p* value < 0.001; **—*p* value < 0.01; *—*p* value < 0.05; .—*p* value < 0.10.

Table 10. The results of the structural equations model—model 2.

	Direct Effects		Indirect Effects	Direct Effect Sizes (f2)		Total Effects (Direct Effect + Indirect Effect via Preoccupation for Money)
	Preoccupation for Money	PA	PA	Preoccupation for Money	PA	PA
Preoccupation with money	–	0.139 *** (<0.001)	–		0.040	0.139 *** (<0.001)
FAIR	0.090 * (0.021)	0.017 (0.354)	0.012 (0.346)	0.015	0.001	0.029 (0.255)
MASS	0.353 *** (<0.001)	–0.015 (0.365)	0.049. (0.058)	0.141	0.003	0.034 (0.223)
HAWPACH	0.085 * (0.026)	–0.110 ** (0.003)	0.012 (0.353)	0.007	0.021	–0.099 * (0.013)
VLT	0.099 * (0.013)	0.122 ** (0.006)	0.014 (0.331)	0.014	0.022	0.136 *** (<0.001)
Gender Male	Reference	Reference	Reference			Reference
Female	–0.128 ** (0.002)	–0.165 *** (<0.001)	–0.018 (0.285)	0.019	0.046	–0.183 *** (<0.001)
Age	0.040 (0.181)	0.131 ** (0.001)	0.006 (0.429)	0.003	0.023	0.137 *** (<0.001)
ACADISH	–	0.376 *** (<0.001)	–	–	0.180	0.376 *** (<0.001)
NEF	–	–0.088 * (0.023)	–	–	0.017	–0.088 * (0.023)
POF	–	0.026 (0.276)	–	–	0.003	0.026 (0.276)
SELFEFF	–	0.002 (0.486)	–	–	0.000	0.002 (0.486)
R2 /Adjusted R2	20%/19%	34.5%/33%	–	–	–	–

Note: ***—*p* value < 0.001; **—*p* value < 0.01; *—*p* value < 0.05; .—*p* value < 0.10.

These results show the estimated direct, indirect, and total effects, along with their statistical significance. The effect size for each of the direct paths is also reported. Tables 9 and 10 indicate good explanatory power with R-squared values of 19.6% (preoccupation with money), 21.1% (tax evasion and social insurance fraud), and 16.7% (piracy acceptance). The overall model fit, measured by the standardized root mean square residual (SRMR), is 0.06 for both versions of the model, well within the acceptable level. In general, it is considered that a SRMR < 0.08 indicates a very good fit [60].

Tables 11 and 12 summarize the results already presented in Tables 9 and 10 by indicating the direction and the significance of each relationship in simplified form, showing the two versions of the model side-by-side. FAIR has no significant impact—direct or indirect—on either outcome variable. It does, however, have a marginally significant total effect on TESIFA, and it is a significant predictor of the mediator variable. The belief in fairness does not appear to increase or reduce the level of tolerance towards deviant or fraudulent behavior. It does increase, however, the preoccupation with money, which makes sense if one perceives money as a means of keeping the score for effort and diligence.

Table 11. The results of the structural equations model, simplified and side-by-side (via the mediator).

Predictor	Preoccupation for Money	Direct Effects		Indirect Effects		Total Effects	
		TESIFA	PA	TESIFA	PA	TESIFA	PA
FAIR	+ (*)	None	None	None	None	+ (.)	None
MASS	+ (***)	+ (*)	None	None	+ (.)	+ (**)	None
HAWPACH	+ (*)	- (*)	- (**)	None	None	- (.)	- (*)
VLT	+ (*)	+ (.)	+ (***)	None	None	+ (.)	+ (***)
Gender	Reference	Reference	Reference			Reference	Reference
Male	-	-	-	None	None	-	-
Female	(***)	(*)	(***)			(*)	(***)
Age	None	- (**)	+ (**)	None	None	- (*)	+ (***)

Note: ***—*p* value < 0.001; **—*p* value < 0.01; *—*p* value < 0.05; .—*p* value < 0.10.

Table 12. The results of the structural equations model, simplified and side-by-side (predictors only).

Predictor	Tax Evasion and Security Insurance Fraud	Piracy Acceptance
PFM	+ (*)	+ (***)
ACADISH	+ (***)	+ (***)
NEF	- (***)	- (*)
POF	- (.)	None
SELFEFF	- (***)	None

Note: ***—*p* value < 0.001; **—*p* value < 0.01; *—*p* value < 0.05; .—*p* value < 0.10.

MASS is a positive and significant predictor of the mediator variable, and has a significant and positive total effect on TESIFA. There is a direct, significant, and positive effect on TESIFA, but there is no indirect effect. The total effect of MASS on the level of piracy acceptance is not statistically significant. However, when decomposed, the indirect effect (via the mediator, preoccupation about money) is marginally significant (*p* = 0.058), while the direct effect is not at all significant. Therefore,

preoccupation with money marginally mediates the relationship between MASS and the level of piracy acceptance. Money as social status increases the level of tolerance towards tax evasion and social insurance fraud. As expected, this relationship appears to be mediated by the preoccupation with money.

Interestingly, money as social status does not increase the level of piracy acceptance, and one can only speculate as to why this is the case. Perhaps tax evasion pays better than piracy, and the opportunity cost expressed in terms of social status is higher. On the other hand, money as social status is associated with a stronger sense of entitlement that extends to defying the authority of the government, whereas piracy is merely petty behavior relegated to penny-pinching. People who need money to enhance their social status are more likely to wear an Armani suit and use an expensive MacBook Pro while dodging taxation; they are less likely to wear a knock-off pair of shoes and use a pirated version of Windows. Expensive notebooks and pirated software do not go together well.

HAWPACH has a negative total effect on both TESIFA and PA, yet the relationship is significant only in the case of PA, and is marginally significant in the case of TESIFA. Direct effects are significant in both cases, but indirect effects are not at all significant. Although HAWPACH is a predictor of Preoccupation with money, the latter does not mediate the relationship with the outcome variables.

This result is highly expected, because one would assume that valuing hard work is at loggerheads with any type of cheating. One can attribute the difference in significance between the two models to the fact that piracy is probably a tangible and real experience that students (who make up our entire sample) can relate to in daily life. On the other hand, most of the students probably have a good mental representation of tax evasion and social insurance fraud, but not yet the experience of engaging in such behavior. Piracy is at hand, while tax evasion is a potential.

VLT has a positive total effect on both outcome variables, yet the relationship is significant only in the case of PA. There are no indirect effects and the only significant direct effect is in the relationship with PA, while this is marginally significant in the case of TESIFA. Although VLT is a predictor of preoccupation with money, the latter does not mediate the relationship with the outcome variables. People valuing leisure time appear to be more tolerant towards cheating and fraudulent behavior. This might be explained by the perceived high opportunity cost of hard work.

Gender has a statistically significant total effect on both TESIFA and PA. There are no indirect effects, only direct effects. As is the case with the previous two variables, gender predicts preoccupation with money, yet the latter does not act as a mediator in the relationship with the outcome variables. As expected, women are less inclined to tolerate tax evasion, social insurance fraud, and piracy.

A relatively similar situation appears in the case of age—the total effects are significant and there are only direct effects on TESIFA and PA. However, the effects on the two outcome variables have opposite signs—TESIFA decreases, but PA increases with age. Moreover, age is not a predictor of preoccupation with money. Older students appear less tolerant towards tax evasion and social insurance fraud, yet more tolerant towards piracy. This is hard to explain without introducing additional assumptions and variables that cannot be pursued and tested here.

The relationship between ACADISH and the two outcome variables is positive and highly significant, as expected. NEF is negatively and significantly related to both TESIFA and PA, yet POF is only marginally related to TESIFA, and not at all to PA. Self-efficacy is negatively and significantly related to TESIFA, and not at all to PA.

5. Discussion

Contextual effect and dispositional effect predictors appear segregated according to the statistical significance of their relationship with the two outcome variables. If one sets aside the case of money as social status (for reasons discussed earlier), one notices that the entire set of contextual effects predictors show a stronger statistical significance in their relationship to piracy acceptance; and a weaker statistical significance in their relationship to tax evasion and social insurance fraud acceptance. One might interpret this in light of the fact that most of the students who answered our questionnaire

are perhaps much more often exposed to, or engaged in piracy than in tax evasion and social insurance fraud at this stage in their life. Piracy represents a behavior one can easily relate to, while tax evasion is still a theoretical possibility.

On the other hand, dispositional effect predictors show a stronger statistical significance in their relationship with tax evasion and social insurance fraud acceptance than in the case of piracy acceptance. Perhaps the former variable is seen as more consequential and less socially acceptable than the latter; hence, a behavior such as tax evasion, by virtue of its perceived importance, is more likely to be at the center of thought processes associated with self-evaluation, self-cognition, and self-control.

Money priming has been shown to increase materialistic values and to make people more unscrupulous, yet contextual effects predict the outcomes without the mediation of PFM, although PFM, as expected, remains a predictor of both outcomes. Academic dishonesty is predicting cheating and fraudulent behavior well beyond the workplace, and size effects are the largest among all the predictors.

Both models have a good explanatory power. The predictors explain about 30% or more of the variation of the outcome constructs. Moreover, 20% of the variation of the mediator is explained by contextual and control variables (gender and age). From a practical perspective, the relative contribution of each individual predictor to the combined explanatory power of the model matters a lot. This contribution is usually measured in terms of effect sizes. In order for an intervention to be of any consequence, the effect size has to be above 0.02 [61]. By far, academic dishonesty displays the largest effect size of all predictors for both models. This is without any doubt one of the more important findings of this research.

In order to reduce the acceptance of tax evasion, social insurance fraud, piracy, and perhaps of other types of cheating and fraud, it helps to act on academic dishonesty first and foremost [62]. It has been shown that business students who are coached and sensitized about social responsibility and ethical management appear less inclined to engage in dishonest behavior and are less tolerant towards cheating [4]. Sometimes, simple, old-fashioned moral education and making people self-aware about cheating and deception in the context of social norms might be sufficient to effect a shift in attitudes. Short-circuiting self-deception through sensitivity training represents in itself a deterrent to cheating [5].

In the case of tax evasion and social insurance fraud, another lever appears to be self-efficacy. Boosting self-efficacy seemingly reduces the acceptance of tax evasion. However, this result is more or less trivial. In the case of piracy acceptance, gender and age also show small effect sizes, which are suitable for intervention. Both gender and age, however, represent control variables in this model, and they cannot be manipulated or acted upon in the same way as one might act upon other predictors.

In a similar vein, negative feelings also show relevant effect sizes (in the case of the first outcome variable) but cannot and should not be manipulated—without raising serious ethical concerns—merely for the sake of reducing the level of tolerance towards tax evasion.

Finally, preoccupation with money appears to have a small effect size on both outcome variables. Here, the path of intervention has to go through MASS, which also has a relevant effect size in its relationship with preoccupation with money.

6. Conclusions

An important body of literature shows that academic cheating is a good predictor of cheating and unethical behavior in the workplace. This paper takes this line of research one step further and investigates the relationship between academic dishonesty and other types of unethical and even fraudulent behaviors, well beyond the workplace; the focus is on tax evasion, social insurance fraud, and piracy. The source of data is a sample of 504 respondents, all students, aged 18–25. The PLS-PM analysis used in this research alternates the outcome variable between tax evasion and social insurance fraud acceptance, and piracy acceptance. The main predictor is academic dishonesty. The control variables are

age, gender, and several latent constructs accounting for context and disposition. Preoccupation with money is used as a mediator between contextual predictors and our outcome variables.

It is contended that the results are consequential because they show that academic dishonesty is a statistically significant predictor of an entire range of unethical and fraudulent behavior acceptance. In addition, one finds that contextual constructs are segregated in the way they impact the two outcome variables. One explanation is that the sample is composed of students, and the respondents relate differently to tax evasion and social insurance fraud acceptance than to piracy acceptance for obvious reasons. The most important result, however, is that the effect size of the main predictor is large. This should shift the focus to a broader debate about how to fight academic dishonesty most efficiently. It is a question that should be taken very seriously, because there is a lot at stake—cheating has far-reaching implications, measured in billions of dollars. Yet again, the question of ethical behavior in general does not represent an esoteric, theoretical concept. It is consequential precisely because morality relates to real costs, some direct and tangible, other indirect and harder to ascertain, but which are nevertheless significant. The findings presented here have certain limitations. There is no doubt that vigorous intervention should be undertaken to influence the attitude towards academic dishonesty, but there is no obvious indication on how to achieve this. Effective intervention should start in school and university, but the most appropriate course of action should be the subject of other research. Last but not least, the focus of this study has been on attitudes rather than on behavior. It is unclear the extent to which the attitudes measured here would translate into actual behavior, be it academic cheating, tax evasion, or piracy.

Author Contributions: Conceptualization, E.D. and R.I.-C.; methodology, E.D. and C.V.; software, E.D. validation, I.M.; formal analysis, E.D.; investigation, R.I.-C., I.M., and R.M.-P.; resources, R.M.-P.; data curation, E.D.; writing—E.D., C.V., and R.I.-C.; writing—review and editing, E.D. and C.V.; funding acquisition, R.M.-P.

Funding: This research received no external funding.

Acknowledgments: This research was supported by a Marie Curie Research and Innovation Staff Exchange scheme within the H2020 Programme (grant acronym: SHADOW, no: 778118).

Conflicts of Interest: The authors declare no conflict of interest.

References

1. LaDuke, R.D. Academic Dishonesty Today, Unethical Practices Tomorrow? *J. Prof. Nurs.* **2013**, *29*, 402–406. [[CrossRef](#)] [[PubMed](#)]
2. Nonis, S.; Swift, C.O. An Examination of the Relationship Between Academic Dishonesty and Workplace Dishonesty: A Multicampus Investigation. *J. Educ. Bus.* **2001**, *77*, 69–77. [[CrossRef](#)]
3. Lucas, G.M.; Friedrich, J. Individual Differences in Workplace Deviance and Integrity as Predictors of Academic Dishonesty. *Ethics Behav.* **2005**, *15*, 15–35. [[CrossRef](#)]
4. Chen, Y.-J.; Tang, T.L.-P. Attitude Toward and Propensity to Engage in Unethical Behavior: Measurement Invariance across Major among University Students. *J. Bus. Ethics* **2006**, *69*, 77–93. [[CrossRef](#)]
5. Mazar, N.; Ariely, D. Dishonesty in everyday life and its policy implications. *J. Public Policy Mark.* **2006**, *25*, 117–126. [[CrossRef](#)]
6. Harper, M.G. High tech cheating. *Nurse Educ. Pract.* **2006**, *6*, 364–371. [[CrossRef](#)]
7. Schmelkin, L.P.; Gilbert, K.; Spencer, K.J.; Pincus, H.S.; Silva, R. A Multidimensional Scaling of College Students' Perceptions of Academic Dishonesty. *J. High. Educ.* **2008**, *79*, 587–607. [[CrossRef](#)]
8. Brown, D.L. Cheating Must Be Okay—Everybody Does It! *Nurse Educ.* **2002**, *27*, 6. [[CrossRef](#)]
9. Faucher, D.; Caves, S. Academic dishonesty: Innovative cheating techniques and the detection and prevention of them. *Teach. Learn. Nurs.* **2009**, *4*, 37–41. [[CrossRef](#)]
10. Gaberson, K.B. Academic Dishonesty Among Nursing Students. *Nurs. Forum* **1997**, *32*, 14–20. [[CrossRef](#)]
11. Carpenter, D.D.; Harding, T.S.; Finelli, C.J.; Passow, H.J. Does academic dishonesty relate to unethical behavior in professional practice? An exploratory study. *Sci. Eng. Ethics* **2004**, *10*, 311–324. [[CrossRef](#)] [[PubMed](#)]

12. Li-Ping Tang, T.; Chen, Y.-J.; Sutarso, T. Bad apples in bad (business) barrels: The love of money, Machiavellianism, risk tolerance, and unethical behavior. *Manag. Decis.* **2008**, *46*, 243–263. [CrossRef]
13. Sheard, J.; Markham, S.; Dick, M. Investigating Differences in Cheating Behaviours of IT Undergraduate and Graduate Students: The maturity and motivation factors. *High. Educ. Res. Dev.* **2003**, *22*, 91–108. [CrossRef]
14. Gerlach, P. The games economists play: Why economics students behave more selfishly than other students. *PLoS ONE* **2017**, *12*, e0183814. [CrossRef] [PubMed]
15. Harris, J.R. A Comparison of the Ethical Values of Business Faculty and Students: How Different Are They? *Bus. Prof. Ethics J.* **1988**, *7*, 27–49. [CrossRef]
16. Wood, J.A.; Longenecker, J.G.; McKinney, J.A.; Moore, C.W. Ethical attitudes of students and business professionals: A study of moral reasoning. *J. Bus. Ethics* **1988**, *7*, 249–257. [CrossRef]
17. Bacon, A.M.; McDaid, C.; Williams, N.; Corr, P.J. What motivates academic dishonesty in students? A reinforcement sensitivity theory explanation. *Br. J. Educ. Psychol.* **2019**. [CrossRef]
18. Błachnio, A. Don't cheat, be happy. Self-control, self-beliefs, and satisfaction with life in academic honesty: A cross-sectional study in Poland. *Scand. J. Psychol.* **2019**, *60*, 261–266. [CrossRef]
19. Fida, R.; Tramontano, C.; Paciello, M.; Ghezzi, V.; Barbaranelli, C. Understanding the Interplay Among Regulatory Self-Efficacy, Moral Disengagement, and Academic Cheating Behaviour During Vocational Education: A Three-Wave Study. *J. Bus. Ethics* **2018**, *153*, 725–740. [CrossRef]
20. Keener, T.A.; Galvez Peralta, M.; Smith, M.; Swager, L.; Ingles, J.; Wen, S.; Barbier, M. Student and faculty perceptions: Appropriate consequences of lapses in academic integrity in health sciences education. *BMC Med. Educ.* **2019**, *19*, 209. [CrossRef]
21. Blankenship, K.L.; Whitley, B.E. Relation of General Deviance to Academic Dishonesty. *Ethics Behav.* **2000**, *10*, 1–12. [CrossRef]
22. Fass, R. Cheating and plagiarism. *Ethics High. Educ.* **1990**. Available online: <https://eric.ed.gov/?id=ED324727> (accessed on 12 November 2019).
23. Walsh, K. Understanding Taxpayer Behaviour—New Opportunities for Tax Administration. *Econ. Soc. Rev.* **2012**, *43*, 451–475.
24. Lim, V.K.G.; Teo, T.S.H. Sex, money and financial hardship: An empirical study of attitudes towards money among undergraduates in Singapore. *J. Econ. Psychol.* **1997**, *18*, 369–386. [CrossRef]
25. Yamauchi, K.T.; Templer, D.J. The Development of a Money Attitude Scale. *J. Personal. Assess.* **1982**, *46*, 522–528. [CrossRef] [PubMed]
26. Fox, S.; Spector, P.E.; Miles, D. Counterproductive Work Behavior (CWB) in Response to Job Stressors and Organizational Justice: Some Mediator and Moderator Tests for Autonomy and Emotions. *J. Vocat. Behav.* **2001**, *59*, 291–309. [CrossRef]
27. Caruso, E.M.; Vohs, K.D.; Baxter, B.; Waytz, A. Mere exposure to money increases endorsement of free-market systems and social inequality. *J. Exp. Psychol. Gen.* **2013**, *142*, 301–306. [CrossRef]
28. Phau, I.; Woo, C. Understanding compulsive buying tendencies among young Australians: The roles of money attitude and credit card usage. *Mark. Intell. Plan.* **2008**, *26*, 441–458. [CrossRef]
29. McHoskey, J.W. Factor structure of the protestant work ethic scale. *Personal. Individ. Differ.* **1994**, *17*, 49–52. [CrossRef]
30. Mudrack, P.E. Protestant work-ethic dimensions and work orientations. *Personal. Individ. Differ.* **1997**, *23*, 217–225. [CrossRef]
31. Mirels, H.L.; Garrett, J.B. The Protestant Ethic as a personality variable. *J. Consult. Clin. Psychol.* **1971**, *36*, 40–44. [CrossRef]
32. Hassall, S.L.; Muller, J.J.; Hassall, E.J. Comparing the Protestant work ethic in the employed and unemployed in Australia. *J. Econ. Psychol.* **2005**, *26*, 327–341. [CrossRef]
33. Amos, C.; Zhang, L.; Read, D. Hardworking as a Heuristic for Moral Character: Why We Attribute Moral Values to Those Who Work Hard and Its Implications. *J. Bus. Ethics* **2019**, *158*, 1047–1062. [CrossRef]
34. Murdock, T.B.; Stephens, J.M. 10—Is Cheating Wrong? Students' Reasoning about Academic Dishonesty. In *Psychology Academic Cheating*; Anderman, E.M., Murdock, T.B., Eds.; Academic Press: Burlington, ON, Canada, 2007; pp. 229–251. ISBN 978-0-12-372541-7.
35. Jensen, L.A.; Arnett, J.J.; Feldman, S.S.; Cauffman, E. It's Wrong, But Everybody Does It: Academic Dishonesty among High School and College Students. *Contemp. Educ. Psychol.* **2002**, *27*, 209–228. [CrossRef]

36. Ciarrochi, J.; Heaven, P.C.; Davies, F. The impact of hope, self-esteem, and attributional style on adolescents' school grades and emotional well-being: A longitudinal study. *J. Res. Personal.* **2007**, *41*, 1161–1178. [[CrossRef](#)]
37. Mullen, S.P.; Gothe, N.P.; McAuley, E. Evaluation of the factor structure of the Rosenberg Self-Esteem Scale in older adults. *Personal. Individ. Differ.* **2013**, *54*, 153–157. [[CrossRef](#)]
38. Rosenberg, M. *Society and the Adolescent Self-Image*; Princeton University Press: Princeton, NJ, USA, 2015; ISBN 978-1-4008-7613-6.
39. Fox, S.; Spector, P.E. A model of work frustration–aggression. *J. Organ. Behav.* **1999**, *20*, 915–931. [[CrossRef](#)]
40. Schwarzer, R.; Jerusalem, M. The general self-efficacy scale (GSE). *Anxiety Stress Coping* **2010**, *12*, 329–345.
41. Luszczynska, A.; Scholz, U.; Schwarzer, R. The General Self-Efficacy Scale: Multicultural Validation Studies. *J. Psychol.* **2005**, *139*, 439–457. [[CrossRef](#)]
42. Reiss, M.C.; Mitra, K. The Effects of Individual Difference Factors on the Acceptability of Ethical and Unethical Workplace Behaviors. *J. Bus. Ethics* **1998**, *17*, 1581–1593. [[CrossRef](#)]
43. Scholz, U.; Doña, B.G.; Sud, S.; Schwarzer, R. Is general self-efficacy a universal construct? Psychometric findings from 25 countries. *Eur. J. Psychol. Assess.* **2002**, *18*, 242. [[CrossRef](#)]
44. Hoon, L.S.; Lim, V.K.G. Attitudes towards money and—for Asian management style following the economic crisis. *J. Manag. Psychol.* **2001**, *16*, 159–173. [[CrossRef](#)]
45. Chitchai, N.; Senasu, K.; Sakworawich, A. The moderating effect of love of money on relationship between socioeconomic status and happiness. *Kasetsart J. Soc. Sci.* **2018**. [[CrossRef](#)]
46. Vohs, K.D. Money priming can change people's thoughts, feelings, motivations, and behaviors: An update on 10 years of experiments. *J. Exp. Psychol. Gen.* **2015**, *144*, e86–e93. [[CrossRef](#)] [[PubMed](#)]
47. Mitchell, M.S.; Baer, M.D.; Ambrose, M.L.; Folger, R.; Palmer, N.F. Cheating under pressure: A self-protection model of workplace cheating behavior. *J. Appl. Psychol.* **2018**, *103*, 54–73. [[CrossRef](#)]
48. Kouchaki, M.; Smith-Crowe, K.; Brief, A.P.; Sousa, C. Seeing green: Mere exposure to money triggers a business decision frame and unethical outcomes. *Organ. Behav. Hum. Decis. Process.* **2013**, *121*, 53–61. [[CrossRef](#)]
49. Piff, P.K. Wealth and the Inflated Self: Class, Entitlement, and Narcissism. *Personal. Soc. Psychol. Bull.* **2014**, *40*, 34–43. [[CrossRef](#)]
50. Durvasula, S.; Lysonski, S. Money, money, money—How do attitudes toward money impact vanity and materialism?—The case of young Chinese consumers. *J. Consum. Mark.* **2010**, *27*, 169–179. [[CrossRef](#)]
51. Roberts, J.A.; Jones, E. Money Attitudes, Credit Card Use, and Compulsive Buying among American College Students. *J. Consum. Aff.* **2001**, *35*, 213–240. [[CrossRef](#)]
52. Roberts, J.A.; Sepulveda, M.C.J. Demographics and money attitudes: A test of Yamauchi and Templers (1982) money attitude scale in Mexico. *Personal. Individ. Differ.* **1999**, *27*, 19–35. [[CrossRef](#)]
53. Wernimont, P.F.; Fitzpatrick, S. The meaning of money. *J. Appl. Psychol.* **1972**, *56*, 218–226. [[CrossRef](#)]
54. Roberts, J.A.; Sepulveda, M.C.J. Money Attitudes and Compulsive Buying. *J. Int. Consum. Mark.* **1999**, *11*, 53–74. [[CrossRef](#)]
55. Fornell, C.; Bookstein, F.L. Two Structural Equation Models: LISREL and PLS Applied to Consumer Exit-Voice Theory. *J. Mark. Res.* **1982**, *19*, 440–452. [[CrossRef](#)]
56. Joreskog, K.G.; Wold, H. The ML and PLS techniques for modeling with latent variables: Historical and comparative aspects. In *Systems under Indirect Observation: Part I*; Joreskog, K.G., Wold, H., Eds.; North-Holland: Amsterdam, The Netherlands, 1982; pp. 263–270.
57. Nunnally, J.C.; Bernstein, I.H. *Psychometric Theory*, 3rd ed.; McGraw-Hill: New York, NY, USA, 1994; ISBN 978-0-07-047849-7.
58. Fornell, C.; Larcker, D.F. Evaluating structural equation models with unobservable variables and measurement error. *J. Mark. Res.* **1981**, *18*, 39–50. [[CrossRef](#)]
59. Kennedy, P. *A Guide to Econometrics*, 6th ed.; Wiley-Blackwell: Malden, MA, USA, 2008; ISBN 978-1-4051-8257-7.
60. Hu, L.; Bentler, P.M. Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Struct. Equ. Model. Multidiscip. J.* **1999**, *6*, 1–55. [[CrossRef](#)]

61. Cohen, J. *Statistical Power Analysis for the Behavioral Sciences*, 2nd ed.; Routledge: Hillsdale, MI, USA, 1988; ISBN 978-0-8058-0283-2.
62. Mirshekary, S.; Lawrence, A.D.K. Academic and Business Ethical Misconduct and Cultural Values: A Cross National Comparison. *J. Acad. Ethics* **2009**, *7*, 141–157. [[CrossRef](#)]



© 2019 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<http://creativecommons.org/licenses/by/4.0/>).