



# Personal infidelity and professional conduct in 4 settings

John M. Griffin<sup>a,1</sup>, Samuel Kruger<sup>a</sup>, and Gonzalo Maturana<sup>b</sup>

<sup>a</sup>McCombs School of Business, University of Texas at Austin, Austin, TX 78712; and <sup>b</sup>Goizueta Business School, Emory University, Atlanta, GA 30322

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**We study the connection between personal and professional behavior by introducing usage of a marital infidelity website as a measure of personal conduct. Police officers and financial advisors who use the infidelity website are significantly more likely to engage in professional misconduct. Results are similar for US Securities and Exchange Commission (SEC) defendants accused of white-collar crimes, and companies with chief executive officers (CEOs) or chief financial officers (CFOs) who use the website are more than twice as likely to engage in corporate misconduct. The relation is not explained by a wide range of regional, firm, executive, and cultural variables. These findings suggest that personal and workplace behavior are closely related.**

police | financial advisors | CEOs | fraud | personal conduct

By ensnaring leaders in entertainment, politics, business, media, education, and the law, and highlighting the magnitude of workplace sexual misconduct, the #MeToo movement has generated renewed interest in personal conduct. However, there is substantial disagreement as to how personal and professional conduct relate to one another. While many argue that affairs should not affect employment, some have recently questioned whether the personal behavior and attitudes of executives contribute to corporate cultures that tolerate sexism and sexual harassment. In the language of the literature on the economics of information (1), the relevance of personal conduct to professional conduct depends on whether personal conduct is an informative signal about professional conduct. This debate plays out in a practical way every time a senior executive or candidate for a high political office is involved in a personal scandal. Public reactions vary with the situation and are informed by little, if any, empirical evidence.\*

There is a long-standing debate in philosophy and psychology regarding the extent to which behavior and ethics are situational. The classical view is that character traits such as honesty and faithfulness drive personal actions. In contrast, “situationism holds that in practice what in some times and places we call right is in other times and places wrong. Norms are contingent, have no transcendent status” (2). Hence, it is common to assume that there are different standards for private relationships compared with “business ethics” (3, 4). In psychological terms, individual behavior is often thought to be highly contingent upon context and situation, thereby calling into question the existence of character traits (5–7). However, others critique this view and argue that personal traits influence one’s thinking and interact with the situation across diverse contexts (8, 9). A large literature in psychology assesses the relative importance of individual, organizational, and situational factors in ethical decision making (10, 11). Potential individual influences include cognitive moral development (12), moral disengagement (13), Machiavellianism (14), relativism (15), and religion (16). This literature typically assesses the relation between survey results or experimental shocks to individual characteristics and experimental evidence of behavior. Recent economics literature analyzes the relations between personality traits and firm actions (17) and between personal legal infractions and corporate conduct (18, 19). We

focus on the relation between observed personal infidelity and 4 forms of observed professional misconduct.<sup>†</sup>

## Methodology

The biggest challenge to understanding the connection between personal conduct and business decisions is that personal conduct is typically unobserved. We construct a proxy for personal marital infidelity using data from Ashley Madison (AM) users. Operating under the slogan “Life is short. Have an affair,” AM is an online service that advertises itself as a dating service for married people to have “discreet encounters.” AM’s website and service description as of June 2015, pictured in *SI Appendix, Fig. S1* and discussed in *SI Appendix*, are clearly focused on marital infidelity, and we find evidence that at least 97% of the chief executive officers (CEOs) and chief financial officers (CFOs) in our sample with paid AM usage are married. Despite promises of discretion, the data were put in the public domain through a hack in 2015 that included data on 36 million user accounts, including 1.0 million paid users in the United States. AM usage was widespread across the United States and included professionals and executives from a wide range of industries (*SI Appendix, Figs. S2 and S3 and Table S1*).

The AM data generated widespread public attention, and AM has publicly confirmed that its data were compromised. The broad consensus is that the AM data are accurate (20, 21). However, some AM profiles may be fake, particularly for female users (22). We have discussed the use of the data with many people, including attorneys, who confirm that the data are permissible to use for research purposes because the data are now in the public domain and available for research use in the same way that they are available to and used by the press. We believe it is also ethical to use the data, and the use of hacked data has become common both by the press and in academia.

## Significance

**The relative importance of personal traits compared with context for predicting behavior is a long-standing issue in psychology. This debate plays out in a practical way every time an employer, voter, or other decision maker has to infer expected professional conduct based on observed personal behavior. Despite its theoretical and practical importance, there is little academic consensus on this question. We fill this void with evidence connecting personal infidelity to professional behavior in 4 different settings.**

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<sup>†</sup>To whom correspondence may be addressed. Email: john.griffin@utexas.edu.

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\*For example, alleged affairs derailed the careers of John Edwards, Mark Sanford, Eliot Spitzer, Herman Cain, Anthony Weiner, and others but did seemingly little to affect the political careers of Bill Clinton and Donald Trump.

<sup>†</sup>This approach differs from the previous literature both by considering 4 different professional settings and by exploring a dimension of personal behavior that is of widespread interest and practical importance, and that is intimately connected to personal trust and honesty. In contrast to previous research (18, 19), our measure of personal misconduct captures behavior that violates trust but is not illegal. Analyzing police officers, financial advisors, and SEC defendants allows us to observe the connection between personal and professional conduct beyond the managerial settings previously analyzed.

**Table 1. Matched sample comparisons**

Variable	Misconduct	Matched	t-statistic
<b>Panel A: Police officers</b>			
AM trans.	2.9%	1.3%	3.37
AM overall	7.1%	3.1%	3.76
Experience	23.4	23.4	0.37
Age	51.4	51.5	-0.32
N	960	960	
<b>Panel B: Financial advisors</b>			
AM trans.	3.3%	1.4%	2.87
AM overall	7.4%	3.9%	4.23
Experience	25.1	25.1	1.28
Age	54.4	54.7	-1.66
N	1,319	1,319	
<b>Panel C: SEC defendants compared with financial advisors</b>			
AM trans.	4.1%	2.3%	1.81
AM overall	8.3%	3.4%	3.80
Age	53.8	53.6	1.88
Male	93%	93%	
N	613	613	
<b>Panel D: SEC defendants compared with CEOs and CFOs</b>			
AM trans.	4.0%	1.8%	2.36
AM overall	8.4%	2.6%	4.49
Age	53.8	54.0	-5.09
Male	95%	95%	
N	569	569	

Misconduct professionals are matched to control professionals based on detailed employment data. AM trans. and AM overall are the percentage of the sample with paid AM transactions and any AM usage, respectively. Experience and Age are mean years. Male is the percentage of the sample that is male. The t-statistics test the null hypothesis that means of the 2 populations are equal, with SEs that are clustered by police district in panel A, by firm and county in panel B, and by lawsuit in panels C and D.

We examine professional behavior in 4 settings: Chicago police officers with substantial complaints, financial advisors engaging in misconduct, US Securities and Exchange Commission (SEC) white-collar criminals, and CEOs and CFOs of firms that engage in misconduct. In all 4 settings, we measure the relation between professional misconduct and personal usage of AM by matching data on individuals in the professional setting to AM transaction data. The first 3 settings demonstrate the link between personal AM usage and professional misconduct. The fourth setting goes a step further by linking the personal conduct of CEOs and CFOs to corporate outcomes. Detailed firm-level data allow us to examine this last setting most thoroughly.

First, we collect detailed data on Chicago police officers from the Citizens Police Data Project. The data include complaints from citizens and other police officers, work histories for all police officers, and identifying information. We analyze a sample of 960 male misconduct police officers, defined as officers with at least 1 sustained complaint (i.e., a complaint resulting in discipline or a reprimand) or at least 5 total complaints in 2010 to 2018. We match these police officers to a control group of police officers working in the same police district within Chicago with similar ages and years of experience who have never had a sustained complaint and had no more than 1 overall complaint in 2010 to 2018.

Second, we collect detailed information on financial advisors from Financial Industry Regulatory Authority BrokerCheck data, which identify employment history and potential misconduct for all US financial advisors (23). We analyze a sample of 1,319 male financial advisors who have a record of misconduct in 2015 or 2016.<sup>‡</sup> We compare these individuals with misconduct-free male advisors who work for the same firms in the same counties and have similar experience.

Third, we identify and collect data on 613 defendants to civil litigation initiated by the SEC in federal court, which are available in the SEC's litigation

<sup>‡</sup>Misconduct is defined as customer disputes that result in a settlement or award, employment separation after allegations, final regulatory judgments, final criminal actions, or final civil actions.

release archives. These are civil lawsuits alleging criminal activity such as insider trading (120 observations), Ponzi schemes (57 observations), pump and dump operations (44 observations), and other financial fraud (392 observations). We compare the AM usage of SEC defendants with that of the general population (controlling for gender and age) and with 2 matched samples, financial advisors working in the same county with the same gender and similar ages and a second matched sample of CEOs and CFOs working for companies headquartered within 50 miles with the same gender and similar ages.

Fourth, for our largest sample, we examine 2,654 CEOs, 2,797 CFOs, and 15,360 other top executives of public companies between 2008 and 2014 based on Execucomp data. As discussed in *SI Appendix*, a large and growing finance literature shows that senior executives significantly affect firm decisions (24–36). We find 47 CEOs, 48 CFOs, and 159 other top executives who were paid AM users.<sup>§</sup> We then compare the corporate conduct of firms with and without executives who are AM users. We also analyze county-level AM usage as a potential measure of regional culture, motivated by a growing literature showing that firm misconduct is related to culture (37–43). As an indicator for corporate misconduct, we use a measure of whether a firm was the subject of a securities class action lawsuit or engaged in a financial misstatement, both of which are common measures used in the accounting and finance literatures (34, 44–46).

We identify AM users based on name and address. To avoid possible false matches, we focus on AM users with paid transactions, which can be matched to individuals in professional settings based on both names and credit card billing addresses. To identify residential and mailing addresses that can be matched to AM, we use detailed public records searches based on names, locations, and employment information. While our methodology for finding professionals in the AM data is entirely based on publicly available data, we believe we may be the first to systematically perform this match. In particular, news searches for “Ashley Madison” and the executive names in our sample do not find any press mentions, and we find no evidence of stock return reactions when the AM data were released (*SI Appendix*, Fig. S4), whereas stock prices generally react negatively to news of scandals (47). Concurrent research matches AM data to geographic areas and company employees more generally as measures of firm culture (37, 38).<sup>¶</sup> Additional details on the data sources and matching procedures are included in *SI Appendix*.

While AM usage is a big step forward for empirically investigating marital infidelity, we recognize that, like any empirical proxy, it is imperfect. AM usage represents a subset of overall marriage infidelity and could reflect different personal traits than other types of infidelity.<sup>#</sup> On the other hand, the same thing is true for any evidence of marital infidelity and for most other empirical proxies. Inferences are made for a particular person with a particular behavior, detected by a particular means. Despite its limitations, AM usage provides us with a unique large-sample measure to empirically analyze an important question that has previously been addressed solely with speculation and anecdotes.

## Results

If AM usage is associated with professional misconduct, we expect AM usage to be related to behavior across different professional settings. We start by investigating police officers, financial advisors, and defendants to SEC litigation alleging fraud and white-collar crime. These settings are interesting both because of their importance to public policy and investors and because they involve professional conduct that is captured at the individual level. We then consider whether AM usage by corporate executives is related to corporate misconduct.

<sup>§</sup>Including matches to unpaid AM usage (i.e., matches to AM user data based on zip code and personal email addresses found in public records in addition to transaction matches), we find 68 CEOs, 65 CFOs, and 185 other executives in the AM data.

<sup>¶</sup>Our paper and a working paper by Grieser et al. (38) are the first users of the AM data in finance and economics applications, but the papers have different focuses and use different data. The working paper by Grieser et al. (38) analyzes company culture through the number of email addresses in AM's user data with a company's domain name. In contrast, we match executives to AM transaction data based on names and addresses from detailed public records searches. Of the 214 executives we match to AM transaction data, only 4 use their corporate email addresses for AM. Parsons et al. (37) consider regional geographic differences in AM usage.

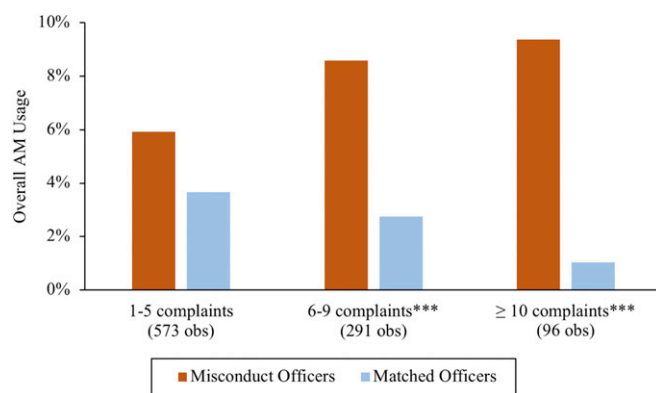
<sup>#</sup>Studies suggest that 20 to 40% of men and 20 to 25% of women have an extramarital affair at some point in their lives (48).

**Police Officers.** To assess whether the personal conduct of police officers relates to their professional conduct, we compare the AM usage of police officers with misconduct to the matched control sample of police officers without misconduct. Panel A of Table 1 compares the 2 samples. The matched misconduct and control samples have nearly identical ages and years of experience. In the control group of police officers without misconduct, 1.3% of police officers have paid AM transactions. Among police officers who engaged in misconduct, the AM transaction usage rate is 2.9%, which is over twice as high, and the difference is highly statistically significant, with a *t*-statistic of 3.37 based on SEs clustered by police district. Significance levels and *P* values reflect 2-sided tests here and throughout our paper and tables. Overall AM usage, which includes all AM transaction users and additional matches based on email address matches to AM’s user data, is also over twice as high for misconduct officers compared with matched control officers, with a *t*-statistic of 3.76.

Table 2 reports results from case–control logistic regressions of police misconduct on AM usage controlling for age and years of experience. As reported in column (1) of Table 2, AM paid transaction usage has an odds ratio of 2.38 with a *z*-statistic for the regression coefficient of 3.23, implying that police officers with paid AM accounts are over twice as likely to engage in misconduct as other police officers. Results are similar for overall AM usage in column (2) of Table 2.

Fig. 1 plots overall AM usage for misconduct and matched nonmisconduct police officers by number of complaints for the misconduct officer. AM usage is elevated for all misconduct officers, but the differences increase as the number of complaints increases. For officers with 1 to 5 complaints, AM usage is 2.3 percentage points higher, but the difference is not statistically significant. AM usage is 5.8 percentage points higher for misconduct officers with 6 to 9 complaints and 8.3 percentage points higher for misconduct officers with at least 10 complaints. Both differences are statistically significant at the 1% level. In supplementary analysis, we find that AM usage is elevated for misconduct officers with and without sustained complaints and that elevated AM usage is concentrated in officers with the most severe complaints, which include use of force, criminal misconduct, domestic abuse, bribery, and official corruption (*SI Appendix, Fig. S5*). We also find that the results are robust to dropping domestic abuse and other off-duty complaints (*SI Appendix, Fig. S5*).

**Financial Advisors.** Panel B of Table 1 compares financial advisors with a record of professional misconduct in 2015 or 2016 with a matched sample of financial advisors with no record of misconduct to assess whether the personal conduct of financial advisors relates to their professional conduct. Age and years of



**Fig. 1.** AM usage of police officers by number of complaints. This figure plots overall AM usage rates for misconduct and matched nonmisconduct police officers. Misconduct police officers have at least 1 sustained complaint or at least 5 total complaints in 2010 to 2018. The figure splits misconduct police officers by number of complaints in 2010 to 2018. Differences between misconduct and matched advisors are significant at the \*\*\*1%, \*\*5%, or \*10% level, with SEs clustered by police district. obs, observations.

experience are nearly identical for the misconduct and control samples. Misconduct and control advisors are also similar on other examination and state registration characteristics considered by past research (23) (*SI Appendix, Table S2*). In the control group of financial advisors who did not engage in misconduct, 1.4% of financial advisors are paid AM users. Among financial advisors who engaged in misconduct, the AM transaction usage rate is 3.3%, which is over twice as high, and the difference is highly statistically significant, with a *t*-statistic of 2.87 based on SEs clustered by firm and county. Similarly, the overall AM usage rate is 3.9% for the control sample compared with 7.4% for misconduct financial advisors, which is large and highly significant, with a *t*-statistic of 4.23. To check that these differences are not due to characteristic differences that we did not match on, *SI Appendix, Table S3* reports results for regressions that control for experience, age, examinations, and state registrations, with nearly identical results. We also find no evidence that firm-level AM usage relates to misconduct (*SI Appendix, Table S4*), which reinforces that AM usage captures personal conduct as opposed to firm culture.

Columns (3) to (6) of Table 2 report case–control logistic regressions of misconduct on AM usage. The regressions control for age, years of experience, examinations the financial advisor has passed, and an indicator for advisors who are registered in more than 3 states. As reported in column (3) of Table 2, the

**Table 2.** Regressions of misconduct on AM usage for police officers and financial advisors

Variable	(1)	(2)	(3)	(4)	(5)	(6)
Sample	Police	Police	Fin. adv.	Fin. adv.	Fin. adv. ( <i>r</i> )	Fin. adv. ( <i>r</i> )
AM transaction usage	2.38*** (3.23)		2.23*** (2.79)		3.22*** (2.68)	
Overall AM usage		2.37*** (3.89)		1.86*** (3.71)		1.93*** (2.64)
<i>N</i>	1,920	1,920	2,624	2,624	1,518	1,518
Pseudo- <i>R</i> <sup>2</sup>	0.003	0.006	0.029	0.030	0.030	0.029

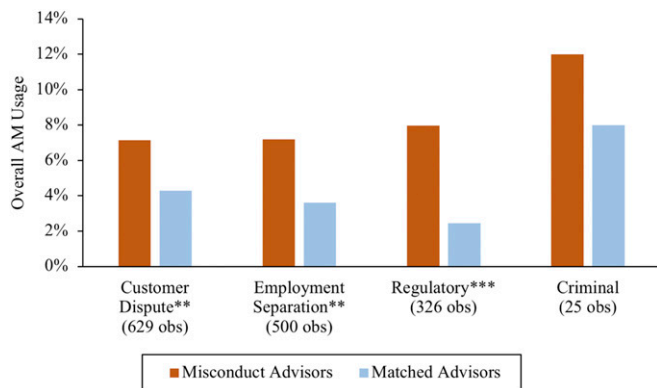
Each column reports odds ratios and *z*-statistics (in parentheses) from separate logistic regressions of misconduct on an indicator variable for the specified type of AM usage. The police regressions in the first 2 columns control for age and experience, with SEs clustered by police district. The financial advisor (Fin. adv.) regressions in the remaining 4 columns control for age, experience, indicators for major examination qualifications (series 65/66, 63, 7, 6, and 24), number of other qualifications, and an indicator for registration in more than 3 states, with SEs clustered by firm and county. The restricted sample analyzed in the last 2 columns consists of misconduct–control pairs in which the misconduct financial advisor had no misconduct before 2015. \*\*\**P* < 0.01.

odds ratio for paid AM usage is 2.23, indicating that paid AM users are more than twice as likely to engage in misconduct, with a highly significant z-statistic of 2.79 for the coefficient. The odds ratio for overall AM usage in column (4) of Table 2 is 1.86, with a z-statistic of 3.71. To control for past misconduct, we restrict the sample to the 759 matched pairs in which the misconduct financial advisor had no misconduct before 2015. By design, all control financial advisors have no prior misconduct. As reported in columns (5) and (6) of Table 2, AM usage is even more predictive of misconduct in this subsample, with odds ratios of 3.22 for AM transaction usage and 1.93 for overall AM usage, both of which are significant at the 1% level. Previous research finds that past offenders are 5-fold more likely to engage in misconduct (23). AM usage is less predictive of misconduct than past misconduct but is still highly informative, particularly in the subsample with no past misconduct.

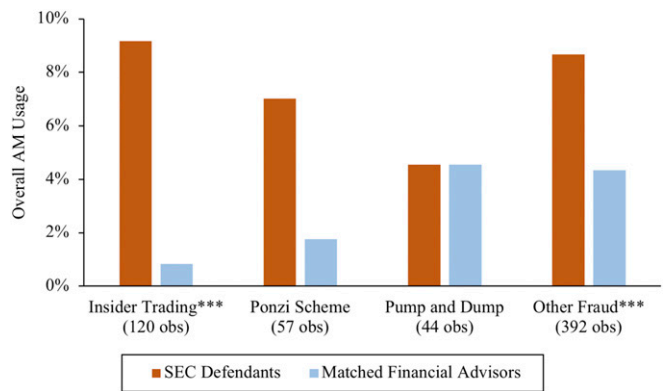
We conclude our analysis of financial advisors by examining different types of misconduct in Fig. 2. Financial advisors with misconduct associated with customer disputes, employment separation, regulatory proceedings, and criminal violations all had elevated AM usage compared with their matched nonmisconduct counterparts. The differences are statistically significant in all but the criminal group, which has only 25 observations. *SI Appendix, Fig. S6* plots AM usage for high and low financial damage awards and by amount of misconduct before 2015. Across all subpopulations, misconduct financial advisors have higher AM usage than their control group counterparts, and most of the differences are statistically significant.

**SEC Defendants.** Panel C of Table 1 shows that 4.1% of SEC defendants accused of white-collar crimes have paid AM transaction usage. Expanding our AM matching criteria to include email matches to AM user data in addition to the transaction matches, we find that 8.3% of SEC defendants have AM accounts. These rates of AM usage are high relative to AM transaction usage by the general population, which is 1.0% after controlling for the gender and age of SEC defendants.

Because AM usage varies by age, geographical location, and other personal characteristics, for comparison purposes, we turn to the matched financial advisor and CEO/CFO samples. Matching to financial advisors and CEO/CFOs with similar characteristics gives us useful points of comparison with populations of professionals in the same geographic area with the same gender and similar age. Only 2.3% of matched financial advisors and 1.8% of



**Fig. 2.** AM usage of financial advisors by type of misconduct. This figure plots overall AM usage rates for misconduct and matched nonmisconduct financial advisors. Misconduct advisors have misconduct on their Financial Industry Regulatory Authority records in 2015 or 2016. The figure splits misconduct financial advisors by type of misconduct. Differences between misconduct and matched advisors are significant at the \*\*\*1% level, \*\*5% level, or \*10% level, with SEs clustered by firm and county. obs, observations.



**Fig. 3.** AM usage of SEC defendants by infraction type. This figure plots overall AM usage rates for SEC defendants and matched nonmisconduct financial advisors by type of infraction alleged in the SEC complaints between 2010 and 2015. The types included are insider trading, Ponzi schemes, pump and dump schemes, and other fraud (e.g., securities or accounting fraud). Differences between misconduct and matched advisors are significant at the \*\*\*1% level, \*\*5% level, and \*10% level, with SEs clustered by lawsuit. obs, observations.

matched CEOs and CFOs have AM transactions, and overall AM usage is 3.4% and 2.6%, respectively, for the 2 matched samples. Thus, SEC defendants are roughly twice as likely to be in the AM transaction data and 3-fold as likely to be AM users compared with the matched control samples. The difference in AM transaction rates is significant at the 10% level for financial advisors (with a *t*-statistic of 1.81) and at the 5% level for CEO/CFOs (with a *t*-statistic of 2.36). Differences in AM usage more generally are significant at the 1% level for both control samples (with *t*-statistics of 3.80 and 4.49, respectively). SEs are clustered by lawsuit, which can have multiple defendants.

Fig. 3 plots SEC defendant and matched financial advisor AM usage rates by type of infraction alleged in the SEC complaint. AM usage is elevated relative to matched financial advisors in general. However, due to the small sample sizes, the differences are independently significant only for insider trading and the other fraud category, which includes general securities and accounting fraud. AM usage by type of infraction for matched CEOs and CFOs is plotted in *SI Appendix, Fig. S7* with similar results.

**Corporate Infractions.** To assess the impact of personal ethics on corporate outcomes, we compare firms with a CEO or CFO who has used AM with firms without CEO or CFO AM usage at the firm-year level. *SI Appendix, Table S5* and *Fig. S8* describe the data. We use a logistic regression framework to control for executive and firm characteristics that may be related to corporate infractions. We first focus on the combined corporate infraction indicator and estimate logistic regressions in which the dependent variable is a dummy that takes the value of 1 for the firm-years affected by a class action lawsuit or a financial statement restatement. The main explanatory variables of interest are AM CEO/CFO, a dummy that takes the value of 1 in firm-years in which a firm's CEO or CFO is a confirmed AM transaction user, and AM paid usage (county), the per capita paid AM usage rate of the county in which the firm is headquartered. In our baseline regressions, we pool together CEO and CFO AM users because this gives us a larger population, and we hypothesize that CEOs and CFOs matter more than other executives. Our analysis is at the firm-year level, and we consider CEOs and CFOs to be AM users only if they are matched to a transaction that occurred before or during the firm-year being considered.

Table 3 reports marginal effects from the logistic regressions (ordinary least squares regressions with similar results are reported

**Table 3. AM CEOs/CFOs and corporate infraction likelihood**

Variable	(1)	(2)	(3)
AM CEO/CFO	0.056*** (2.86)	0.055*** (2.83)	0.050** (2.47)
AM paid usage (county)		0.052* (1.65)	0.114** (2.51)
State and industry FE	No	No	Yes
N	7,899	7,862	7,342
Pseudo-R <sup>2</sup>	0.023	0.026	0.085
Mean of dependent variable	0.056	0.056	0.060

Each column reports marginal effects and z-statistics (in parentheses) of separate logistic regressions. Marginal effects are computed as the derivative of the response with respect to the explanatory variable. The dependent variable is corporate infraction, an indicator variable for firm-years affected by a class action lawsuit or a financial statement restatement. AM CEO/CFO is an indicator variable for firm-years in which a firm has either a CEO or CFO who is a paid user of the AM website. AM paid usage (county) is the per capita paid AM usage rate in the county of the firm's headquarters. All regressions control for year fixed effects, CEO age, CEO gender, CEO tenure, CFO age, CFO gender, firm size, return on assets, Tobin's Q, and market leverage. State and industry fixed effects (FE) are included in the regression. SEs are clustered by firm. \*\*\* $P < 0.01$ ; \*\* $P < 0.05$ ; \* $P < 0.1$ .

in *SI Appendix, Table S6*). Column (1) of Table 3 shows that the probability of infraction is 5.6 percentage points higher for firms with AM CEOs or CFOs than for firms without an AM CEO or CFO, after controlling for executive age, CEO tenure, executive gender, firm size (log of book asset value), return on assets, Tobin's Q, market leverage, and year fixed effects. The unconditional probability of infraction in the sample is 5.6%. Thus, having an AM CEO or CFO doubles a firm's infraction probability. The marginal effect is strongly statistically significant, as indicated by the z-statistic of 2.86 (implying a  $P$  value of less than 1%), with SEs clustered by firm.

In column (2) of Table 3, we include the county-level paid AM usage rate as an additional explanatory variable. County-level AM usage is useful as a control for any regional differences related to AM usage and helps to isolate the direct effect of CEO/CFO AM usage. Adding county-level AM usage has almost no impact on the AM CEO/CFO coefficient, which is 5.5 percentage points. County-level AM paid usage is somewhat associated with corporate infractions, with a z-statistic of 1.65. While this is consistent with county-level AM usage being a proxy for cultural differences that influence corporate conduct, the effect is modest and sensitive to what control variables we include in the regression.

To control for potential differences across states or industries, column (3) of Table 3 adds fixed effects for states and 2-digit standard industrial classification codes, with similar results. In *SI Appendix, Table S7*, we control for CEO and CFO legal infractions to distinguish AM usage from personal legal infractions studied in previous research (18), with similar results. In *SI Appendix, Tables S8–S10*, we separately consider the 2 types of infractions and the separate impacts of CEOs and CFOs, with similar results. Additional details and alternative specifications are discussed in *SI Appendix*.

### Interpretation

The influence that AM CEOs and CFOs have on firm misconduct is consistent with the large impact that executives have on firm decisions more generally (24). Nonetheless, one potential concern is that the relation between infidelity and misconduct could be driven by omitted firm characteristics, potentially reinforced by endogenous matching of executives to firms. As an alternative empirical strategy, we perform a propensity score matching of AM firms to non-AM firms in the same industry and year, with similar results (*SI Appendix, Tables S11 and S12*). Our results are also

robust to controlling for a wide range of firm characteristics, including local culture, executive optimism, multiple corporate governance measures, returns, return volatility, and accounting patterns potentially associated with misreporting, as well as alternative variable definitions and data samples (*SI Appendix, Tables S13–S17*).

To assess the role of corporate culture, we analyze AM usage by top executives other than CEOs and CFOs. If firm culture is the driving force behind our results, we would expect infraction firms to attract and hire AM users throughout the executive ranks. Instead, we find that non-CEO/CFO executive AM usage is unrelated to corporate infractions (*SI Appendix, Table S13*). This is consistent with the interpretation that either the cheating of CEOs and CFOs is a much better measure of firm-level culture than the cheating of other firm executives or that CEOs and CFOs who cheat in their personal life are more prone to allow or promote cheating in the corporate context. The latter interpretation is supported by our finding that the AM usage of individual financial advisors, but not firms as a whole, is related to financial advisor misconduct. The relation between CEO/CFO AM usage and corporate infractions is also robust to controlling for a wide range of culture-related regional control variables that are largely uncorrelated with county-level AM usage (*SI Appendix, Table S13 and Fig. S9*). Additionally, AM usage has little relation to firm performance and corporate decisions that are not typically associated with misconduct (*SI Appendix, Tables S18 and S19*). As discussed more extensively in *SI Appendix*, we cannot fully rule out all reverse causality and endogenous selection of unethical CEO and CFO possibilities. Nonetheless, even if these channels drive part of the results, this still implies a strong relation between personal and professional conduct, consistent with our findings for police officers, financial advisors, and SEC defendants.

### Conclusion

It is increasingly clear that corporate fraud is both widespread and costly (44). However, because it is difficult to measure personal conduct, we know little about the extent to which intimate personal behavior is relevant to professional misconduct and fraud. We introduce a measure of personal conduct by examining marital infidelity, which is intimately connected to personal trust and honesty. Our analysis spans 4 settings, including police misconduct, financial advisor misconduct, white-collar prosecutions, and corporate infractions, and explores a dimension of personal behavior that is of widespread interest and practical importance.

While AM usage predicts professional conduct across multiple settings, we recognize that it is an imperfect proxy. AM usage represents a subset of overall marriage infidelity and excludes many other forms of unethical personal behavior. Most people make serious mistakes at some point in their life in various forms, and personal character attributes, judgment, and values can change significantly over time. Given these data limitations, the strong empirical findings are even more compelling evidence that personal conduct is closely related to workplace actions.

More broadly, our findings suggest that personal and professional lives are connected and cut against the common view that ethics are predominantly situational. This supports the classical view that virtues such as honesty and integrity influence a person's thoughts and actions across diverse contexts and has potentially important implications for corporate recruiting and codes of conduct. A possible implication of our findings is that the recent focus on eliminating sexual misconduct in the workplace may have the auxiliary effect of reducing fraudulent workplace activity.

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- J. E. Stiglitz, The contributions of the economics of information to twentieth century economics. *Q. J. Econ.* **115**, 1441–1478 (2000).
- J. F. Fletcher, *Situation Ethics: The New Morality* (Westminster John Knox Press, Louisville, KY, 1997).
- M. Josephson, Inventory of ethical issues in business. *Ethics: Easier Said than Done* **2**, 49 (1989).
- R. W. Bartlett, S. M. Ogilby, Business versus personal values: Does a double standard exist? *Bus. Prof. Ethics J.* **15**, 37–63 (1996).
- H. Hartshorne, M. A. May, *Studies in the Nature of Character: I. Studies in Deceit* (Macmillan, New York, 1928).
- W. Mischel, *Personality and Assessment* (Psychology Press, New York, 2013).
- G. Harman, XIV-Moral philosophy meets social psychology: Virtue ethics and the fundamental attribution error. *Proc. Aristotelian Soc.* **99**, 315–331 (1999).
- K. S. Bowers, Situationism in psychology: An analysis and a critique. *Psychol. Rev.* **80**, 307–336 (1973).
- I. Ajzen, *Attitudes, Personality, and Behavior* (McGraw-Hill Education, New York, 2005).
- M. J. O'Fallon, K. D. Butterfield, A review of the empirical ethical decision-making literature: 1996–2003. *J. Bus. Ethics* **59**, 375–413 (2005).
- J. J. Kish-Gephart, D. A. Harrison, L. K. Treviño, Bad apples, bad cases, and bad barrels: Meta-analytic evidence about sources of unethical decisions at work. *J. Appl. Psychol.* **95**, 1–31 (2010).
- J. Greenberg, Who stole the money, and when? Individual and situational determinants of employee theft. *Organ. Behav. Hum. Decis. Process.* **89**, 985–1003 (2002).
- J. R. Detert, L. K. Treviño, V. L. Sweitzer, Moral disengagement in ethical decision making: A study of antecedents and outcomes. *J. Appl. Psychol.* **93**, 374–391 (2008).
- K. Kiazad, S. L. D. Restubog, T. J. Zagenczyk, C. Kiewitz, R. L. Tang, In pursuit of power: The role of authoritarian leadership in the relationship between supervisors' Machiavellianism and subordinates' perceptions of abusive supervisory behavior. *J. Res. Pers.* **44**, 512–519 (2010).
- T. S. Rai, K. J. Holyoak, Exposure to moral relativism compromises moral behavior. *J. Exp. Soc. Psychol.* **49**, 995–1001 (2013).
- O. Yilmaz, H. G. Bahçekapili, Without God, everything is permitted? The reciprocal influence of religious and meta-ethical beliefs. *J. Exp. Soc. Psychol.* **58**, 95–100 (2015).
- I. D. Gow, S. N. Kaplan, D. F. Larcker, A. A. Zakolyukina, CEO personality and firm policies. <http://www.nber.org/papers/w22535>. Accessed 26 July 2019.
- R. Davidson, A. Dey, A. Smith, Executives' "off-the-job" behavior, corporate culture, and financial reporting risk. *J. Financ. Econ.* **117**, 5–28 (2015).
- M. Mironov, Should one hire a corrupt CEO in a corrupt country? *J. Financ. Econ.* **117**, 29–42 (2015).
- J. Pagliery, Now you can search the Ashley Madison cheaters list, *CNN Business* (2015) <https://money.cnn.com/2015/08/19/technology/ashley-madison-search/>. Accessed 18 July 2019.
- C. Dewey, How to search the Ashley Madison leak, *The Washington Post* (2015) <https://www.washingtonpost.com/news/the-intersect/wp/2015/08/19/how-to-see-if-you-or-your-spouse-appear-in-the-ashley-madison-leak/>. Accessed 18 July 2019.
- A. Newitz, Almost none of the women in the Ashley Madison database ever used the site, *Gizmodo* (2015) <https://gizmodo.com/almost-none-of-the-women-in-the-ashley-madison-database-1725558944>. Accessed 18 July 2019.
- M. Egan, G. Matvos, A. Seru, The market for financial adviser misconduct. *J. Polit. Econ.* **127**, 233–295 (2019).
- M. Bertrand, A. Schoar, Managing with style: The effect of managers on firm policies. *Q. J. Econ.* **118**, 1169–1208 (2003).
- Y. Jia, L. van Lent, Y. Zeng, Masculinity, testosterone, and financial misreporting. *J. Account. Res.* **52**, 1195–1246 (2014).
- D. Yermack, Flights of fancy: Corporate jets, CEO perquisites, and inferior shareholder returns. *J. Financ. Econ.* **80**, 211–242 (2006).
- S. N. Kaplan, N. M. Klebanov, M. Sorensen, Which CEO characteristics and abilities matter? *J. Finance* **67**, 973–1007 (2012).
- U. Malmendier, G. Tate, CEO overconfidence and corporate investment. *J. Finance* **60**, 2661–2700 (2005).
- U. Malmendier, G. Tate, J. Yan, Overconfidence and early-life experiences: The effect of managerial traits on corporate financial policies. *J. Finance* **66**, 1687–1733 (2011).
- M. D. Cain, S. B. McKeon, CEO personal risk-taking and corporate policies. *J. Financ. Quant. Anal.* **51**, 139–164 (2016).
- H. Cronqvist, A. K. Makhija, S. E. Yonker, Behavioral consistency in corporate finance: CEO personal and corporate leverage. *J. Financ. Econ.* **103**, 20–40 (2012).
- J. R. Graham, C. R. Harvey, M. Puri, Managerial attitudes and corporate actions. *J. Financ. Econ.* **109**, 103–121 (2013).
- J. P. Kallunki, E. Pyykkö, Do defaulting CEOs and directors increase the likelihood of financial distress of the firm? *Rev. Account. Stud.* **18**, 228–260 (2013).
- E. Benmelech, C. Frydman, Military CEOs. *J. Financ. Econ.* **117**, 42–59 (2015).
- K. K. Law, L. F. Mills, Military experience and corporate tax avoidance. *Rev. Account. Stud.* **22**, 141–184 (2017).
- J. A. Chyz, Personally tax aggressive executives and corporate tax sheltering. *J. Account. Econ.* **56**, 311–328 (2013).
- C. A. Parsons, J. Sulaeman, S. Titman, The geography of financial misconduct. *J. Finance* **73**, 2087–2137 (2018).
- W. Grieser, R. Li, A. Simonov, Integrity, creativity, and corporate culture. [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2741049](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2741049). Accessed 19 April 2017.
- L. Guiso, P. Sapienza, L. Zingales, The value of corporate culture. *J. Financ. Econ.* **117**, 60–76 (2015).
- L. Biggerstaff, D. C. Cicero, A. Puckett, Suspect CEOs, unethical culture, and corporate misbehavior. *J. Financ. Econ.* **117**, 98–121 (2015).
- G. Grullon, G. Kanatas, J. Weston, Religion and corporate (mis) behavior. [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=1472118](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1472118). Accessed 12 February 2010.
- G. Hilary, K. W. Hui, Does religion matter in corporate decision making in America? *J. Financ. Econ.* **93**, 455–473 (2009).
- J. DeBacker, B. T. Heim, A. Tran, Importing corruption culture from overseas: Evidence from corporate tax evasion in the United States. *J. Financ. Econ.* **117**, 122–138 (2015).
- A. Dyck, A. Morse, L. Zingales, Who blows the whistle on corporate fraud? *J. Finance* **65**, 2213–2253 (2010).
- S. T. McGuire, T. C. Omer, N. Y. Sharp, The impact of religion on financial reporting irregularities. *Account. Rev.* **87**, 645–673 (2011).
- J. M. Karpoff, A. Koester, D. S. Lee, G. S. Martin, Proxies and databases in financial misconduct research. *Account. Rev.* **92**, 129–163 (2017).
- B. N. Cline, R. A. Walking, A. S. Yore, The consequences of managerial indiscretions: Sex, lies, and firm value. *J. Financ. Econ.* **127**, 389–415 (2018).
- M. A. Whisman, D. K. Snyder, Sexual infidelity in a national survey of American women: Differences in prevalence and correlates as a function of method of assessment. *J. Fam. Psychol.* **21**, 147–154 (2007).