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# Disrupting Corruption using Education: A “Prisoner’s Dilemma” Approach

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## Abstract

Corruption is an age-old issue. Although various mitigation measures have been developed over time, it persistently exists and transforms with the dynamic business environment. The development of corruption is linked to the skills of criminals to cover their tracks. Control mechanisms and other lines of defense are insignificant when persons of power override, bully or collaborate to carry out corruption. Since humans are perceived to be rational, educating individuals on the evils of corruption with its apparent negative connotations would have been a logical approach to disrupting corruption. However, the growing trend of corruption reflects otherwise. Human behavior is subjective and based on a person–situation complexity, relationships and associations around human life. This pilot study assesses the decisions of individuals based on various corruption scenarios, using 20 questions modeled around Corruption Dimensions and Prisoner’s Dilemma. Of the respondents, 92% had formal exposure to anti-corruption-related studies. Most respondents responded negatively to corruption-related scenarios in the Corruption Dimensions, with noted bias in their criticism when it involved a politician as compared with a businessman. Similarly, the Prisoner’s Dilemma questions also reflected selective reasoning when comparing those with personal relationships as compared with acquaintances. The strength of the evidence, the independence of the judiciary, the ability to escape, the reluctance to self-incriminate and the personal benefits affect the judgment of the respondents. However, in situations involving environmental issues, respondents selected to confess regardless of the situation stating that it was the right thing to do. Education creates awareness on individual rights, options and, to a certain extent, the moral and legal obligations. However, the subjectivity of the person’s associations and lifelong experience also plays a major role in the decision-making process.

**Keywords** corruption; education; prisoner’s dilemma; differential association; corruption dimensions; selective reasoning

## INTRODUCTION

Until the early 1990s, corruption was considered a way of doing business. In subsequent years, global institutions and regulators have sought to reverse this culture. By asserting that corruption is undesirable, it was assumed that education and knowledge could presumably convert the typical rational-thinking individual to understand the evils of corruption. Apart from the significant development of regulations and governance mechanisms over the years, professional and formal educational qualifications have also embedded modules on ethics to educate individuals on the expected code of conduct. The typical member of the board, the C-suite or even junior executives in any firm have been exposed to various anti-corruption, internal controls or governance-based training. However, statistics and indexes reflect that corruption is still a widespread international phenomenon, with increasing damages and losses (including the loss of life) in an era where governance, transparency and accountability are emphasized. Possibly, the only thing that has changed is the *modus operandi* of corruption, with the perpetrators being more creative in covering their tracks and expanding their illegal gains.

This cynical viewpoint is based on several observations. Assuming that the education process had been effectively delivered, ignorance should not be a plausible excuse. Does this mean that the education and knowledge were insufficient to meet the objectives; or alternatively could it be that the approach was wrong, and that the stick is deemed to be more effective than the carrot? Or does it boil down to choice and circumstances?

A relevant case that comes to mind that could answer these questions is the ever-famous “Crazy Eddie” fraud. The brutally honest interviews with Sam Antar (the former chief financial officer of Crazy Eddie) revealed that he was intentionally educated and trained to become a certified public accountant (CPA) by his family to execute future sophisticated financial crimes for the family business. He was a brilliant scholar, being on the Dean’s List as well as in the top 1% in the country for the CPA examinations. He put power and loyalty to the family above the motivation of money and has literally disparaged the so-called “rationalization aspect” of many fraud theories by stating that morality does not exist in the criminal world. He believes that punishment or the fear of getting caught does not stop criminals, and proudly boasts about false integrity. The only reason he cooperated with the authorities and subsequently worked with the Federal Bureau of Investigation was to secure his own future.

Sam Antar is not a random case. A simple comparison across many of the white-collar crimes (including corruption) internationally would reveal almost similar trends. Politicians and top management (the C-suite) involved in these crimes are normally educated and knowledgeable, had carried out the fraud intentionally and had taken the necessary steps to avoid detection. Depending on the country’s constitution, legislations can even be easily changed or manipulated, providing opportunities for high-level politicians to mask their illegal activities in a legal manner or to use the protection of “confidentiality” to conceal illegal activities from public knowledge. Their partners-in-crime are normally firms (especially in terms of the public–private partnerships); however, depending on the type of corruption, this could include individuals. This is apparent from the fall of supposedly well-governed firms due to misconduct, involving politicians, auditors and top

management who abuse the position of trust given to them. Likewise, the focus on internal controls hoped to provide the evidence trail for perpetrators; however, with collaboration and over-riding of controls, this too has become redundant at times. Whistleblowers are perceived as criminals due to loopholes that remove the protection, increasing the gap from being morally correct to both politically and legally wrong. However, whistleblowers or witnesses also make “choices” based on perhaps the rewards that could be obtained, the possibility to negotiate a settlement if they become witnesses since they too could have collaborated in the crime and other factors such as the cumbersome process of being a whistleblower. The choices may not necessarily just be motivated by financial gains and could include a variety of factors, such as social factors, lack of protection or other negative impacts. Therefore, this paper posits that choice, education, association and chronology of circumstances influence the perception and reaction of individuals towards corruption.

## **HUMAN BEHAVIOR: CHOICES AND SELECTIVE REASONING TOWARDS CORRUPTION**

Human behavior is complex and is driven by a rich set of values and preferences (Becker 1993). Persons in similar circumstances may react differently at different times. It is largely subjective and based on a person–situation complex, depending on a particular chronology of life experiences, history and associations (Sutherland 1947), with individuals also acquiring patterns of criminal and lawful behavior through interacting and learning from others (Sutherland 1947; Cressey 1952), normally within intimate personal groups. Building on Sutherland and Cressey’s research, the Fraud Triangle infers that when the three elements (opportunity, pressure or motivation and rationalization) are evident, the risk of fraud being perpetrated is higher. The basis of Sutherland’s (1947) perspective assumes that a person becomes delinquent when they perceive that it is more favorable to violate laws; however, it differs with each person’s rationalization. Ozili (2015) found that the perpetrator would seek an opportunity to commit fraud if the incentive exists, and especially if there is ineffective monitoring and control systems, which increases the opportunity to carry out fraud. Becker (1993) questioned the basis of Sutherland’s rationality and implication that individuals become criminals when there is excess of financial or other rewards from crime as compared with legal work after taking account of the likelihood of apprehension, conviction and the severity of punishment. He put forward the argument that persons in similar situations of unlawful gain and no risk of being detected may also chose to not commit crimes, possibly being constrained by moral and ethical considerations. Both Becker (1993) and Ozili (2015) caution that there should not be a narrow perspective to assume that individuals are motivated solely by selfishness and material gains.

Wolfe and Hermanson (2004) add on to the body of knowledge by asserting that even if the three elements of the Fraud Triangle are present, it may be insufficient to commit fraud, as the perpetrator should have the capability to commit the fraud with confidence that it will be undetected. This could include the knowledge, skills, personality and authority that a person should have to influence the success of the scheme. Sutherland (1947) refers to the “Theory of Differential Association” and

“Genetic Explanation of Criminal Behavior” to assert that criminal behavior is learned and not inherited, although the differential associations may vary in frequency, duration, priority and intensity, and includes techniques of committing the crime and the specific direction of motives, drives, rationalizations and attitudes. Cressey (1952) interviewed 125 persons confined for criminal trust violation and found that the skills and techniques that were required to carry out the legitimate routine work of the position of trust were relatively the same skills and techniques used to carry out and cover up the crime; with the skills and techniques undergoing a process of “circumstantiation” over a period of time. This phenomenon is also noted in other researchers’ work and also in the white-collar crimes reported. As an example, executives would have both the knowledge and access to technology in the firms, and would need to perpetrate the crime using the technology. Internal controls that include segregation of duties and levels of authorization would prevent individuals from carrying out fraud themselves. Hence, there would be a need for them to collaborate or hack the system. However, the perpetrators would also be aware that, especially with digital evidence, audit trails and evidence could be traced back to them.

This implies that even with similar backgrounds, education and skill set, an individual can swing either way depending on their perception of the circumstances, selective reasoning or biasness. Truex (2011) views education as a driver of moral perspectives and action, which, ultimately, can reduce the presence of corruption. Ozili (2015) raised concerns that increased education in fraud detection techniques and forensic accounting to the younger generation could also have a negative impact of teaching students methods to commit fraud without trace. To overcome this, Ozili (2015) recommends a balance in teaching methods to ensure that it instead motivates students to do what is right ethically and morally. However, would this truly be effective considering that, ultimately, it boils down to choice based on selective reasoning and bias?

The above facts reflect an important perspective that the typical white-collar criminal could be the typical average professional. Individuals develop general notions of the expected behavior for persons of their status in certain situations and behave accordingly (Cressey 1952). Carrying out an occupational fraud would possibly require the person to rationalize by justifying the benefits of doing so as compared with the risk of losing their reputation if they get caught. Many of the top white-collar criminals have extremely good communication skills and do not portray themselves of having any dubious principles outwardly. In some cases, they have even convinced themselves that they have not done anything wrong.

Apart from the rationality and preferences of potential criminals, the level of crime is also influenced by the perception of fraudsters of the impact of public policies on the economic and social environment (Becker 1993). The perception of the fraudster of the reduced risk of being caught, as well as the lack of prosecution or legal ramifications would further motivate the perpetrator to carry out fraud. Logically, it would not be possible to investigate fully every case or tip that turns up. Each reported fraud case comes with its own set of cost and expected resources, which may not be feasible to take on at times. Hence, firms and regulators alike may choose particular cases to investigate and prosecute, possibly based on the materiality and its public impact. The Association of Certified Examiners’ (ACFE) “Report to the Nations” (ACFE 2018) stated that only 4% of the perpetrators had a prior

fraud conviction. This implies that either they were first-time offenders who got caught or could have prior experience of being a fraudster but just never got caught or convicted. On a firm level, the ACFE report also reported a 16% decline in prosecution of economic crimes due to firms' fear of bad publicity. Similarly, country-level policies also impact the perception. Referring to Gary Becker's Economics of Crime, regulators may prefer to fine rather than imprison perpetrators or give other types of punishment because they can deter crimes effectively if criminals have sufficient financial resources and not judgment proof, with the added motivation that fines are also a source of revenue to the state (Becker 1993). Additionally, perpetrators such as Sam Antar, Andrew Fastow, Richard Bistrong and others have in their own ways become mini celebrities after being convicted, taking on public talks internationally and speaking about their experiences. Whilst it has the positive implications to provide firms and persons responsible for governance and compliance an insight into the mind of the white-collar perpetrator, it may also be an attraction for those seeking media attention and popularity.

Another perspective that could influence choice is the corruption dimension. Truex (2011) identified seven corruption dimensions: (1) Petty *versus* Grand; (2) Gifts *versus* Cash; (3) Public *versus* Private; (4) Politician *versus* Bureaucrat; (5) Deserved *versus* Illicit; (6) Giver *versus* Receiver; (7) Favoritism. The same research reports that Kathmandu respondents were more receptive towards small-scale petty corruption especially when the citizen was seeking access to deserved services and favoritism (Truex 2011).

The above discussion motivates the theme of this study by providing the various angles and scenarios that an individual could face in fraudulent environments. The key question to be answered is the reaction of an individual to the various situations, and to assess the consistency of the individual's reaction to identify themes.

## METHODOLOGY

This survey will be carried out in phases. Although ultimately, the survey aims to reach out to individuals internationally, the initial phase was carried out as a pilot study. The pilot study aims to assess if the questions were posed at an appropriate level and whether it reflected scenarios that would be personal to individuals. The pilot study was opened up to volunteers for a period of 24 hours and 26 respondents participated in the survey via questionnaire and focus group.

This research adapts the work of Truex (2011) in the first part of the survey. In order to understand the attitudes towards corruption, Truex (2011) created a series of questions to test acceptance across the seven dimensions of corruption that were mentioned earlier. The survey was created to understand individual attitudes beyond the simple bribe-receiving behaviors. Respondents were asked to rank nine questions by using a five-point Likert scale ranging from 1 being "highly acceptable" to 5 being "highly unacceptable".

The second part of the survey was based on the recommendation by Becker (1993) that economic theory, especially game theory, needs to incorporate guilt, affection and related attitudes to have a deeper understanding of credible commitments. A game theory approach can effectively explain the basis for decisions of

reasonable individuals to be corrupt (Macrae 1982). However, an individual's decision to be corrupt or otherwise may differ based on their perception of its impact on their associations and various circumstances. Hence, this research uses the "Prisoner's Dilemma" (a type of game theory) to explain why two completely rational persons might not cooperate, even if it is in their best interest to do so.

Building on the Prisoner's Dilemma platform, respondents were provided 11 circumstances and were asked to choose one option only. The respondents had to assume that they are embroiled in a corruption case and are being investigated by the relevant authorities. The respondent had been called in for questioning by the police and the police mention that another individual (Individual A) has also been called in for questioning at the same time for the same case, but in a separate room. Both the respondent and Individual A have three mutually exclusive options:

- To confess to the crime
- Remain silent
- Deny the charges

Depending on both of their choices, the impact is as follows:

- If both the respondent and Individual A deny the charges, both will be released assuming no other evidence exists.
- If both the respondent and Individual A remain silent, each will receive only one year in prison.
- If both confess, each will get two years in prison.
- The final option is for one to confess and the other to remain silent or deny. The person who confesses will go free (depending on if the enforcers have strong evidence) and the one who remains silent or fraudulently denies gets three years in prison.

In addition to deciding based on the three options provided, the respondents were also asked to briefly state their reasons for their decision.

## RESULTS

In the pilot study, 26 respondents from 10 countries participated, consisting of 14 females and 12 males. Of the respondents, 92% fell within the age range of 18 to 39 years, with the remaining 8% falling in the 40 to 61 years range; 50% of the respondents work in an accounting/governance/investigation-related field; 92% of the respondents have exposure to forensic accounting/internal controls/governance/anti-fraud or anti-corruption/ethics or integrity courses, with the remainder having no exposure at all.

Nine questions were posed to respondents to gauge their perception towards corruption based on the corruption dimensions. The majority of the respondents perceived corruption negatively and deemed it unacceptable; however, it was noted that the respondents were more critical towards politicians rather than businessmen when comparing similar situations of corruption. This is evident from the results when comparing questions A2 and A3, and also A4 and A5. In both cases involving

the politicians, 46% (A2) and 50% (A4) found it highly unacceptable, as compared with when the cases involve businessmen where only 27% (A3) and 34% (A5) of the respondents found it highly unacceptable. Two questions (A1 and A9) had the highest number of respondents (65%) rating it as highly unacceptable, referring to the customs official being paid off by the businessman and the poor man bribing the university administrator. Respondents also seemed to be mildly positive (including being neutral) towards A3 (27%), A5 (20%), A6 (24%) and A8 (31%), which included the businessman giving his friend's daughter the job even though there are more qualified applicants, the construction contractor gifting the businessman in exchange for a contract, the businessman bribing the policeman and the student gifting the teacher. Hence, it could be summarized that although the perceptions did vary according to the various scenarios, overall, the respondents were aware of the negative impact of corruption and deemed it to be unacceptable. However, two limitations were noted. The manner on how the questions had been posed seemed to be simplistic and not realistic. Firstly, it was worded as a third person and secondly, it provided a rather direct scenario which did not explore the complexities of corruption. Hence, another set of questions was posed to the respondents to assess further if their moral compass would still hold in various scenarios which would impact them more personally (see Table 1).

Assuming that perceptions towards corruption could be easily classified based on whether it was considered right or wrong, then there should be a consistent response from respondents regardless of the scenario. Based on Table 1, questions B2, B4 and B9 reflect scenarios where the respondent is innocent and has not been involved in the corruption process. B4 and B9 reflect somewhat consistent responses; however, in B2, this was inconsistent with the results from B4 and B9, purely because it involved a person who was close to the respondent (see Table 2).

In the remaining scenarios of B1, B3, B5, B6, B7, B8, B10 and B11 where the respondent has been somewhat involved in the act of corruption, the decision reached also differed. The respondent's perception of the situation including the identity and possible decision of Individual A plays a significant role in the decisions made. If the two individuals are in agreement with each other, the best option for the individuals is to deny (assuming no other evidence exists), followed by both remaining silent and, lastly, for both to confess. However, if the individuals select conflicting options, the individual who confesses would be freed with the other getting three years in prison.

In B1, B2 and B3, the respondent has a personal relationship with Individual A. Both individuals could presumably predict the other's reaction as they have the ability to relate to the other person's mindset with a greater element of trust. Therefore, unsurprisingly, for all three questions, the preference is to "deny": B1 (77%), B2 (42.3%) and B3 (61.5%). However, there are two possible outcomes by selecting "deny". If both Individual A and the respondent were to select "deny", this would be the best solution since both will be released if there is no other evidence. B1 and B3 both insinuate that there is no other evidence due to the careful management by the possible culprits, and reflect that both individuals have a personal relationship and share a similar mindset. Hence, it could be that based on the reflection that Individual A in both the questions was also going to "deny", it would also be a safe bet for the respondents to also "deny". The respondents who selected "deny" in both

**Table 1.** Results for Corruption Dimensions

No.	Question	HA	A	N	UA	HU
A1	A businessman offers a senior customs official a large amount of money to ensure that his goods are not stopped for any checks	0 (0%)	2 (8%)	0 (0%)	7 (27%)	17 (65%)
A2	Even though there were more qualified applicants, a politician had given the job to his friend's daughter	1 (4%)	0 (0%)	3 (12%)	10 (38%)	12 (46%)
A3	Even though there were more qualified applicants, the businessman had given the job to his friend's daughter	2 (8%)	1 (4%)	4 (15%)	12 (46%)	7 (27%)
A4	A construction contractor gives a politician a large gift, hoping to receive a government construction contract	2 (8%)	0 (0%)	0 (0%)	11 (42%)	13 (50%)
A5	A construction contractor gives a businessman a large gift, hoping to receive a private construction contract	2 (8%)	0 (0%)	3 (12%)	12 (46%)	9 (34%)
A6	A businessman offered a small gift to the policeman when he was stopped for speeding	0 (0%)	1 (4%)	5 (20%)	10 (38%)	10 (38%)
A7	A father paid the driving school a minor sum to ensure that his teenage son passed the driving test without any issues	0 (0%)	1 (4%)	1 (4%)	13 (50%)	11 (42%)
A8	A student buys a small gift for the lecturer as a token of appreciation, but secretly hopes to score extra points on the examination	0 (0%)	4 (15%)	4 (16%)	11 (42%)	7 (27%)
A9	The poor man was forced to pay the university administrator a large sum to ensure his daughter got a place in the university	0 (0%)	2 (8%)	1 (4%)	6 (23%)	17 (65%)

Key: HA = highly agreeable; A = agreeable; N = neutral; UA = disagreeable; HU = highly disagreeable.

these questions rationalized that it was a typical way of doing business, there was no evidence and that this would be the best way to safeguard both individuals. The strength of the relationship also played a role here, with more respondents seeking to “deny” when it was a family member (i.e. sibling) as compared with the business partner. B2 has a slightly different twist, whereby although there is a personal relationship, there is a different mindset between the two individuals and the possibility of evidence. Therefore, a lower percentage of respondents selected “deny” (42.3%), followed closely by “confess” (30.7%) and “remain silent” (27%). The participants who selected “deny” and “remain silent” stated that they had mainly done it out of respect and gratitude for the godfather, although the respondents who selected “remain silent” mentioned that they would not cover up for the godfather. Respondents who selected to “confess” stated that it was the right thing to do.



**Table 2.** Results for Prisoner's Dilemma

No.	Question	Deny	Confess	Silent
B1	You are part of a family-owned business and you suspect that Individual A could be your sibling. The both of you had been doing business together for many years and have similar mindsets. The both of you knew this was just business as usual, and that the investigators had no hard evidence yet	20 (77%)	3 (11.5%)	3 (11.5%)
B2	Individual A is possibly your adopted "godfather" who you met at the point when you were at the lowest point of your life, the man who taught you about life, business, made you street wise and has left the business to you. You owe your life to him and shudder to think what life in prison could do to him in his old age, but you have always advised him that bribery was a dangerous practice	11 (42.3%)	8 (30.7%)	7 (27%)
B3	Individual A is your business partner. The business is meticulously run with all transactions carefully recorded in the systems. Even if the investigators look for evidence, it has been creatively managed with no trail that could lead back to either of you	16 (61.5%)	3 (11.5%)	7 (27%)
B4	You are one of the senior executives in the firm and you suspect that Individual A is your superior. The case could be very damaging to the firm, but this could open new doors for you once released since lately, corporate criminals have become media sensations and travel around the world giving talks. You had not been directly involved but knew enough to be an informant	2 (7.7%)	22 (84.6%)	2 (7.7%)
B5	Individual A could possibly be the vendor that you previously received gifts from and have ignored in the last quarter due to the firm's preferred vendor system – it was not that you had promised the vendor any benefits. In this digital age, the assumption is that everything can be traced back to an individual eventually. However, the legislative and judiciary system would have a tough time linking the evidence conclusively to you, especially if you have a good lawyer to handle your case. After all, you have deleted everything	9 (34.6%)	11 (42.3%)	6 (23.1%)
B6	Individual A could be your colleague who was involved in bribery previously, now a possible whistleblower. You panic thinking of your family, friends, career and reputation, even though you believe that you are innocent as the board had approved all transactions	9 (34.6%)	14 (53.9%)	3 (11.5%)
B7	Individual A could be your tanker driver that dumps the firm's waste into the nearby water supply that affected the health of natives and wildlife based on your instruction and paid money to the Health Inspector. There was no documented evidence that you had ordered this	4 (15.4%)	18 (69.2%)	4 (15.4%)

*(Continued)*

**Table 2.** (Continued)

No.	Question	Deny	Confess	Silent
B8	Individual A could be the person that you had spoken out about to the authorities. He is well connected and could have turned the story around to make you seem like the culprit. He has always forced you to do unethical activities on his behalf	0 (0%)	25 (96%)	1 (4%)
B9	Individual A could be the politician you had spoken out about, who kept giving out licenses to the logging companies that had violated the forest with their illegal logging and brutal assaults against the natives and wildlife. His representative had offered you USD 1,000,000 in Bitcoins the night before to withdraw your report and you had said you would think about it	0 (0%)	22 (84.6%)	4 (15.4%)
B10	Individual A could be your employer that you had whistle blown about. You knew you would be entitled to the lucrative whistleblowing reward for coming forward. However, the industry was still not receptive to good governance practices, and your boss was rather influential. There were also issues of possibly losing the whistleblower protection due to the non-disclosure that you had signed and violated plus you had been the gift bearer for several occasions which you had not revealed yet to the authorities. You regret coming forward now, but it might not be too late for you to retract your statement	4 (15.4%)	13 (50%)	9 (34.6%)
B11	You suspect that Individual A could be the politically connected person that you had once bribed. Individual A knows a lot of prominent persons including members of the judiciary. He could buy his way out of this case any time	7 (27%)	11 (42.3%)	8 (30.7%)

The preference for the remaining questions was to “confess”: B4 (84.6%), B5 (42.3%), B6 (53.9%), B7 (69.2%), B8 (96%), B9 (84.6%), B10 (50%) and B11 (42.3%). “Remain silent” was not a preferred choice; however, stronger numbers were noted in B5 (23.1%), B10 (34.6%) and B11 (30.7%). Prominent percentages for the option to “deny” were noted in B5 (34.6%), B6 (34.6%) and B11 (27%). Further analysis is based on the themes of the cases below.

Questions B7 and B9 concern the pollution of the environment, with the respondent being the whistleblower in B9 and perpetrator in B7. There is a noted difference in the percentage of respondents who selected to “confess”, with 84.6% choosing this option in their roles as whistleblowers and only 69.2% when they are the perpetrators. It was heartening to note that 61% of the respondents in B7 and 31% in B9 who chose to “confess” did so as it was the right thing to do. However, 6% who chose to “confess” also indicated the possibility to twist the story to increase the blame on the driver, with another 12% choosing to “confess” as they believed that Bitcoins are still traceable and that hence there was no point in accepting the bribe. In B7, depending on the level of evidence against the driver, there is a possibility that

the driver could confess. If both the individuals confess, then each will get two years in jail. However, if only the respondent confesses, the driver would go to jail for three years and the respondent will go free. In B7, 15.4% chose to “deny” and another 15.4% chose to “remain silent”, totaling up to 30.8% of the respondents. They did so at the risk of the driver confessing and of the respondent being jailed for three years, stating the lack of evidence as the main reasons behind their selections. In B9, there is a possibility that the politician might “deny” or “remain silent”; hence, by confessing and being a whistleblower, the respondent would benefit by not being impacted negatively. Hence, unsurprisingly, none of the respondents chose to “deny” in B9, with 15.6% choosing to “remain silent” since they were offered the money.

Five of the questions involve whistleblowing. In B4, B8, B9 and B10, the respondent is the whistleblower and in B6, Individual A is the whistleblower. B4, B8 and B9 showed significant higher percentages to “confess” at 84.6%, 96% and 84.6%, respectively. In B4 and B10, the respondent is the whistleblower against their own employer with an element of being rewarded. However, whilst B4 did not mention any negative impacts, B10 highlights the possible consequence of future employment issues as well as that the individual had withheld certain information. Hence, B10 reported only 50% chose to “confess”, 34.6% chose to “remain silent” and 15.4% chose to “deny”. Individual A in B10 is the employer, and there is a large possibility that Individual A would either deny or remain silent. In the worst-case scenario, if both the individuals chose to “remain silent”, then they would be sentenced to one year in prison. If the respondent chose to “confess”, they would be freed if the employer chose to “remains silent” or “deny”, but will have to face the negative impact of future possible victimization. Those who chose to “remain silent” did so since they presumed that there would be no protection for them. The respondents who chose to “deny” assumed that Individual A was going to deny the charges as well, hence their selection to remain safe both now and in the future. The remaining respondents for B4 totaling 15.4% were equally divided between “deny” and “remain silent”. Although the 84.6% of respondents who selected to “confess” were commendable, this question noted that the motives to confess were largely influenced by the future opportunities to become famous and to open new opportunities for the respondents. None of the respondents chose to “deny” in B8 and B9, with only 4% choosing to “remain silent” in B8 and 15.4% in B9. Both B8 and B9 involve the respondent whistleblowing against individuals with influential personas. Surprisingly, in B8 even with Individual A having the capability to twist the story and blame the respondent, a significant 96% still chose to “confess”, stating that it is the right thing to do. However, in B9, whilst a commendable 84.6% chose to “confess”, 15.4% chose to “remain silent”, preferring to accept the reward offered, assuming that Individual A in both B8 and B9 would definitely not confess due to their position and capability to influence the legal process. However, when the case is turned against them in B6, only 53.9% of the respondents chose to “confess”, 34.6% chose to “deny” and the remaining 11.5% chose to “remain silent”. The respondents who chose to “deny” or “remain silent” did so as they believed that they had the board’s backing. However, in this case, if Individual A does come forward, then the respondents who confessed would face two years in jail, whilst if they “remain silent” or “deny”, the jail term would be three years.

The perception of the respondent of the strength of the judiciary and legal system also impacts the decision made such as in B5, B8, B10 and B11. In B8 and B11,

Individual A has the capability to manipulate the legal process, and, in both cases, the respondent has carried out unethical activities. However, there was a significant difference in the response to both the questions, with 96% choosing to “confess” in B8 and only 42.3% choosing to “confess” in B11. The remaining 4% in B8 chose to “remain silent”, whereas for B11, 27% chose to “deny” and 30.7% chose to “remain silent”. This difference could be caused by the fact that in B8, the respondent has been forced to carry out the unethical activities and also that the respondent has already spoken out about Individual A. It is also presumed that due to the circumstances and the ability of Individual A in both B8 and B11 to influence the judiciary and legal system, they would choose to “deny” or “remain silent”. Therefore, the response for B8 would be the most beneficial for the 96% of the respondents who chose to “confess”. In B11, the respondents seem to be closely distributed between the three options; with 27% (deny), 30.7% (remain silent) and 42.3% (confess). Those who chose to “deny” did so because they believed that Individual A would “deny” as well and has the power to influence the system. Those who selected to “remain silent” decided to do so in order to not self-incriminate, especially since they have a weak case, and further jeopardize their families and loved ones.

Questions B5 and B10 are concerned about the legislative and judiciary system, including the rights of the individual, whistleblowing protection and non-disclosure agreements. In B5, the respondent has previously received gifts but, however, is skeptical if the evidence could be linked conclusively to the person. The response from the respondent is closely distributed, with 34.6% (deny), 42.3% (confess) and 23.1% (remain silent). However, in this case, it may be difficult to assess the response from Individual A. Individual A might “confess” due to circumstances or revenge; however, there is also a chance that Individual A might chose to “deny” or “remain silent” to prevent self-incrimination. Those who chose to “confess” did so out of fear that Individual A was also going to do the same. However, those who chose to “deny” or “remain silent” did so because they believed that the gift could have been of low value and it could have also been part of the business culture or acceptable within the firm’s code of conduct.

In B10, the scenario indicates a rather matured whistleblowing protection scheme with a reward mechanism and protection. However, it also includes the typical loophole and dilemma of ensuring that the whistleblower follows the correct procedures when whistleblowing. The additional complexity of the uncooperative industry, the respondent’s undisclosed past involvement as well as the highly influential boss reflect that there could be future negative impacts towards the whistleblower in terms of the job market and career development. Likewise, in this question, the responses were closely distributed as well, with 15.4% (deny), 50% (confess) and 34.6% (remain silent). The 50% who chose to “confess” did so as they believed that they would get protection, whilst the remaining 50% who chose to “deny” or “remain silent” thought that they would not get protection looking at the circumstances.

## DISCUSSIONS AND CONCLUSION

The results reflect a consistent trend amongst the respondents. In the first part of the survey, the majority of the respondents on average were critical of corruption.

However, certain dimensions were more prominently criticized, especially those involving politicians in contrast to businessmen. In the second part of the survey, further observations were noted in terms of the respondents' preference. The best option for all scenarios would be for both the respondent and Individual A to deny the allegations. However, respondents mainly selected this option only when they suspected that Individual A was a known and trusted person with personal relations, i.e. the sibling, the godfather and the business partner. A higher percentage was noted especially for the sibling. The other considerations that surfaced included the strength of the evidence available, with the respondents choosing to not self-incriminate, monetary benefits as well as negative impacts from being a whistleblower. Respondents were aware of the evidence trail, regardless of whether it was digital or otherwise, and were receptive to the idea of manipulating the system and evidence for their betterment. It was heartening to note that there seemed to be a more emphatic point of view towards the corruption impacting the environment, wildlife and natives regardless of the respondents' innocence or guilt. The respondents' perception of the independence and strength of the judiciary system also impacted their decisions. In cases where the judiciary could be bribed, the respondents preferred to not self-incriminate themselves. Considering that 92% of the respondents were exposed to some sort of formal training, it was interesting to note that education did impact their mindset. However, depending on the circumstances and selective reasoning, respondents selected options that may not benefit them but did it as it was the right thing to do or, on the other hand, selected options that did benefit them or their loved ones, even though it was not the right thing to do. Respondents also were receptive towards small gifts as it was part of the culture, being bribed and also manipulating systems or documents that could provide evidence back to them.

Although it is too early to conclude based on the small sample size for this pilot study, some strong trends and patterns have surfaced which will be taken into account for the next phase of this study. The results imply that the respondents understood the questions and implications, prior to answering. Further analysis based on control factors such as age, gender and country type would also be beneficial to assess further trends.

As a concluding remark, it is important to note that even though academic and professional modules reflect the expected ethics and measures for anti-fraud or anti-corruption, mirroring regulators and global institutions such as the Organisation for Economic Co-operation and Development, World Bank, etc., the mindset of individuals reflects that it is not a simple black or white answer. The gray perspectives would need to be investigated further prior to recommendations that could perhaps address these issues more efficiently and logically.

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## TRANSLATED ABSTRACTS

### Abstracto

La corrupción es un problema histórico. Aunque se han desarrollado varias medidas de mitigación a lo largo del tiempo, persiste y se transforma de acuerdo con el entorno empresarial dinámico. El desarrollo de la corrupción está vinculado a las habilidades de los delincuentes para cubrir sus huellas. Los mecanismos de control y otras líneas de defensa son insignificantes cuando las personas de poder anulan, intimidan o colaboran para llevar a cabo actos de corrupción. Dado que se percibe a los seres humanos como racionales, las personas educadas sobre los males de la corrupción con sus aparentes connotaciones negativas habrían sido un enfoque lógico para acabar con la corrupción. Sin embargo, la creciente tendencia a la corrupción refleja lo contrario. El comportamiento humano es subjetivo y se basa en la complejidad de la persona-situación, las relaciones y asociaciones en torno a la vida humana. Este estudio piloto evalúa las decisiones de las personas en función de varios escenarios de corrupción, utilizando veinte preguntas modeladas en torno a las Dimensiones de la Corrupción y el Dilema del Prisionero. El 92% de los encuestados tuvo exposición formal a estudios relacionados con la lucha contra la corrupción. La mayoría de los encuestados respondió negativamente a los escenarios relacionados con la corrupción en la Dimensión de la Corrupción, con un marcado sesgo en sus críticas cuando se trataba de un político en comparación con un empresario. De manera similar, las preguntas del Dilema del Prisionero también reflejaron un razonamiento selectivo al comparar a aquellos con relaciones personales con conocidos. La fuerza de las evidencias, la independencia del poder judicial, la capacidad de escape, la renuencia a auto inculparse y los beneficios personales afectan el juicio de los encuestados. Sin embargo, en situaciones que involucran problemas ambientales, los encuestados seleccionaron confesar independientemente de la situación y afirmaron que era lo correcto. La educación crea conciencia sobre los derechos individuales, las opciones y, en cierta medida, las obligaciones morales y legales. Sin embargo, la subjetividad de las asociaciones de la persona y la experiencia de toda la vida también juegan un papel importante en el proceso de toma de decisiones.

**Palabras clave** corrupción; educación; dilema del prisionero; asociación diferencial; dimensiones de la corrupción; razonamiento selectivo

### **Abstrait**

La corruption est un problème séculaire. Bien que diverses mesures d'atténuation aient été élaborées au fil du temps, elles existent de manière persistante et se transforment en fonction de l'environnement commercial dynamique. Le développement de la corruption est lié à la capacité des criminels à brouiller les pistes. Les mécanismes de contrôle et autres lignes de défense sont insignifiants lorsque des personnes au pouvoir passent outre, intimident ou collaborent pour commettre des actes de corruption. Puisque les humains sont perçus comme rationnels, des individus instruits sur les méfaits de la corruption avec ses connotations négatives apparentes auraient été une approche logique pour perturber la corruption. Cependant, la tendance croissante à la corruption reflète le contraire. Le comportement humain est subjectif et basé sur une complexité personne-situation, des relations et des associations autour de la vie humaine. Cette étude pilote évalue les décisions des individus sur la base de divers scénarios de corruption, en utilisant vingt questions modélisées autour des dimensions de la corruption et du dilemme des prisonniers. 92% des personnes interrogées ont été formellement exposées à des études liées à la lutte contre la corruption. La plupart des personnes interrogées ont répondu négativement aux scénarios liés à la corruption dans la dimension corruption, avec un biais notoire dans leurs critiques lorsqu'elles impliquaient un homme politique par rapport à un homme d'affaires. De même, les questions du dilemme du prisonnier reflétaient également un raisonnement sélectif lorsque l'on comparait les personnes ayant des relations personnelles par rapport aux connaissances. La force des preuves, l'indépendance de la magistrature, la capacité de s'évader, la réticence à s'auto-incriminer et les avantages personnels affectent le jugement des intimés. Cependant, dans les situations impliquant des problèmes environnementaux, les répondants ont choisi d'avouer quelle que soit la situation en déclarant que c'était la bonne chose à faire. L'éducation crée une prise de conscience sur les droits individuels, les options et dans une certaine mesure, les obligations morales et légales. Cependant, la subjectivité des associations et de l'expérience de vie de la personne joue également un rôle majeur dans le processus de prise de décision.

**Mots clés** corruption; éducation; dilemme du prisonnier; association différentielle; dimensions de la corruption; raisonnement sélectif

### 抽象的

腐败是一个古老的问题。尽管随着时间的推移已经制定了各种缓解措施，但它始终存在并根据动态的商业环境而变化。腐败的发展与犯罪分子掩盖其踪迹的技能有关。当权力者凌驾、欺凌或合作实施腐败时，控制机制和其他防线就显得微不足道了。由于人类被认为是理性的，因此受过教育的个人了解腐败的邪恶及其明显的负面含义，这将是破坏腐败的合乎逻辑的方法。然而，腐败的增长趋势反映了另一种情况。人类行为是主观的，基于人类生活的复杂性、人际关系和联想。该试点研究使用围绕腐败维度和囚徒困境建模的 20 个问题，评估基于各种腐败情景的个人决策。92% 的受访者曾正式接触过反腐败相关研究。大多数受访者对腐败维度中与腐败相关的情景做出了负面回应，与商人相比，当涉及政治家时，他们的批评存在明显的偏见。同样，囚徒困境问题也反映了在将有个人关系的人与熟人进行比较时的选择性推理。证据的力度、司法的独立性、逃跑的能力、不愿自证其罪和个人利益等都会影响受访者的判断。然而，在涉及环境问题的情况下，受访者选择坦白，无论情况如何，都表明这是正确的做法。教育创造了对个人权利、选择以及在一定程度上的道德和法律义务的认识。然而，人的联想和终生经历的主观性也在决策过程中发挥着重要作用。

**关键词：** 腐败；教育；囚徒困境；差异关联；腐败维度；选择性推理

### نبذة مختصرة

الفساد قضية قديمة. على الرغم من تطویر تدابیر التخفيف المختلفة بمرور الوقت، إلا أنها موجودة باستمرار وتتحول وفقاً لبيئة الأعمال الديناميكية. يرتبط تطور الفساد بممارسات المجرمين لتغطية مساراتهم. تتكون الآليات التحكم وخطوط الدفاع الأخرى غير ذات أهمية عندما يتغلب الأشخاص ذوو السلطة أو يتنكرون أو يتعاونون لتنفيد الفساد. نظراً لأن البشر ينظر إليهم على أنهم عقلانيون، فإن الأفراد المتعلمين بشأن شرو الفساد مع دلالاته السلبية الواضحة سيكفون نهجاً منطقياً لتعطيل الفساد. ومع ذلك، فإن الاتجاه المتزايد للفساد يعكس خلاف ذلك. السلوك البشري شخصي ويسند إلى تعقيد حالة الشخص والعلاقات والارتباطات حول الحياة البشرية. تقويم هذه الدراسة التجريبية قرارات الأفراد بناء على سيناريوهات الفساد المختلفة، باستخدام عشريين سؤالاً على غرار أبعاد الفساد ومعضلة السجناء. 92% من المستجيبين تعرضوا بشكل رسمي للدراسات المتعلقة بمكافحة الفساد. رد معظم المستجيبين بشكل سلبي على السيناريوهات المتعلقة بالفساد في بعد الفساد، مع وجود تحيز ملحوظ في انتقاداتهم عندما يتعلق الأمر بسياسي مقارنة بمرجل أعمال. وبالمثل، عكست أسئلة معضلة السجناء أيضاً التفكير الانتقائي عند مقارنة العلاقات الشخصية مقارنة بالمعارف. إن قوة الأدلة، واستقلال القضاء، والقدرة على الهروب، وعدم الرغبة في تجريم الذات، والجزايا الشخصية تؤثر على حكم المدعى عليهم. ومع ذلك، في المواقف التي تنطوي على قضايا بيئية، اختار المستجيبون الاعتراف بغض النظر عن الموقف الذي ينص على أن هذا هو الشيء الصحيح الذي ينبغي عمله. يخلق التعليم الوعي بالحقوق الفردية والخيارات وإلى حد ما، الالتزامات الأخلاقية والقانونية. ومع ذلك، فإن ذاتية جمعيات الشخص والخبرة الطويلة لدى الحياة تلعب أيضاً دوراً رئيسياً في عملية صنع القرار.

**الكلمات المفتاحية:** الفساد، التعليم، معضلة السجناء، الارتباط التفاضلي، أبعاد الفساد، التفكير الانتقائي



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