WORKING PAPER

Incorporating Insights from Behavioral Science into Public Administration:
Changing Mindsets and Behaviors in the Public Sector Setting

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Abstract

Public administration (PA) is a multidisciplinary field. One important discipline linked to PA is behavioral science. Although there has been a call for the integration of PA and behavioral science, scholars also recognized the failure of this integration. To contribute to the growing trend of research, the current study investigated how mindsets and behaviors in the public sector towards corruption may be changed using behavioral science. With this, the author created a model derived from social cognitive theory, *kapwa* theory, nudge theory, and flexible mindset. This will help individuals learn ethical behaviors and mindsets. The model also reinforces the mindsets, values, behaviors, and other dimensions indicated in the Governance Reform Framework. In doing so, the model hopes to contribute to good governance; strengthen the principles of effectiveness, inclusiveness, and accountability; and help achieve global and national development goals.

Keywords: *psychology, public administration, corruption, behaviors, mindsets*

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Introduction

Public administration (PA) integrates various fields of study (Khuriyatul et al., 2019; Raadschelders, 2011). One of these is behavioral science, which is applied in PA to interpret attitudes and behaviors of groups and individuals (Grimmelikhuijsen et al., 2017). Its contribution to PA has been widely recognized by scholars (Simon, 1976; Downs, 1967; Waldo, 1948). Studies integrating behavioral science and PA emerged due to the laudable contribution of behavioral science in the different subfields of PA (Bretschneider & Straussman, 1992; Schott, 1986; Buchanan, 1974).

Scholars argued that integrating behavioral approaches in public administration could potentially address problems in the public sector, particularly corruption (Olsen et al., 2019; White, 1999). These approaches were used to address problems in the environment (Liu et al., 2017), organization (Resh et al., 2018; Bakker, 2015; Wright, 2014), and even red tape (Kaufmann & Feeney, 2014). Understanding the connection between behavioral science and PA encompasses the level of individuals and groups.

Despite the efforts to connect the two fields, scholars have also recognized a failure of the integration of behavioral science and PA (Olsen et al., 2018; Waldo, 1965; Waldo, 1948). Even in the Philippines, there is a dearth of application of behavioral science in this field (Bonotan & Lapiz, 2015; Brillantes & Fernandez, 2008; Tapales et al., 1995). In particular, attempts at integration did not completely utilize behavioral science in PA research (Brillantes & Perante-Calina, 2018).

Brillantes and Perante-Calina (2018) included the mindsets, values, and behaviors dimension in their Governance Reform Framework. This dimension can be further articulated and integrated in the PA discipline. Hence, this study integrates theories and concepts from behavioral science to this specific dimension to help change individual mindsets and behaviors of public sector employees towards corruption. The main objectives of this study are:

1. to deepen and improve the mindsets, values, and behaviors dimension of the Governance Reform Framework by integrating behavioral science in changing behaviors and mindsets of public sector employees towards corruption;

2. to connect the dimension of mindsets, values, and behavior to the other dimensions of the Governance Reform Framework;

3. to ascertain the importance of integrating behavioral science in the subfields of public administration; and

4. to emphasize the impact of the Governance Reform Framework on the attainment of the Sustainable Development Goals (SDGs).

Integration of Behavioral Science in the Study of Public Administration

Behavioral science is a discipline that studies how humans interact with their constantly changing environment through behavioral patterns and decision-making (Cooke et al., 2018). The discipline was molded by years of research in creating models and frameworks to understand human behavior. Classical approaches used cost-benefit analysis to predict human behavior and make the best decision that results in the least cost and greatest benefits. In contrast, the behavioral approach banks on available information on a certain phenomenon to predict behaviors and make optimal decisions. Behavioral science can be applied to address certain problems in public policies, programs, and outcomes (Cooke et al., 2018).

Behavioral public administration is defined as an "interdisciplinary analysis of public administration from the micro-perspective of individual behavior and attitudes by drawing upon recent advances in our understanding of the underlying psychology and behavior of individuals and groups" (Grimmelikhuijsen et al., 2017, p. 46). Public servants, managers, and citizens are the units of analysis. Individual and group attitudes and behaviors are the focus of this field. Methods in behavioral science and psychology are used in research.

Herbert Simon's Theory of Decisionmaking

One of the prominent public administration scholars who advocated the integration of behavioral sciences and PA was Herbert Simon. He suggested that human behavior is bound by certain limitations imposed by constraints and conditions in the individuals. Simon (1978) then emphasized that the theories of rational behavior may prescribe how people should behave (i.e., normative), or they may describe how people actually behave (i.e., descriptive) under certain conditions.

Simon's (1972) theory of rational behavior may guide research on rationality at the individual or organizational level. The theory may either locate the constraints and conditions in the environment, or constraints that surface from an individual as a processor of information. The latter pertains to bounded rationality (Simon, 1972). Bounded rationality entails that humans cannot be fully rational; they cannot fully weigh costs and benefits in decision-making due to some limitations in cognition and emotions (Shafran et al., 2020; Norgaard, 2018). Simon (1955) also claimed that human beings are so-called "satisficers," making choices that are "good enough" given the limited time to gather and process information (Norgaard, 2018; Tummers, 2020).

The concept of "satisficing," which comes from cognitive and social psychology, is just one of the attempts to integrate behavioral science in public administration. After finding a wide gap between PA theory and the knowledge associated with the learning and choice process from psychology (Tummers, 2020), Simon (1955) tried to establish a symbiotic relationship between the two disciplines.

Corruption in the Philippines

In the Philippines, corruption is seen in all levels and structures of the state (Brillantes & Fernandez, 2010). This varies from national to local corruption, from political to bureaucratic corruption, and from petty to grand corruption. Corruption cases in the Philippines would usually be apparent in the electoral process in which politicians from all levels are involved (Nawaz & Bridi, 2008). Brillantes

and Fernandez (2010) further elucidated that reliance on rich campaign contributors stimulates this practice from these politicians once they are in power. There are also other sources of this practice, such as patronage, state capture, and cronyism.

Due to the diversity of its forms and explanations, corruption cannot be easily defined (Bussell, 2015). The World Bank (1997) definition of corruption refers to abuse of power for private gain. This intricate phenomenon stems from its bureaucratic and political institutions, and its impact on social development varies. The Asian Development Bank (ADB) (1998) defines corruption as the misuse of the position of people in power in public and private sectors, resulting in a behavior that degrades individuals.

Transparency International (TI), an international non-governmental organization that leads anti-corruption campaigns, refers to corruption as the misuse of power entrusted to elected officials, civil servants, and other individuals or groups involved in governance. Other literature described corruption as an abuse of public power or position due to some personal advantage (Fazekas & Tóth, 2016; Rose-Ackerman, 2008; Manzetti & Wilson, 2007; Chang & Chu, 2006; Desta, 2006; Gerring & Thacker, 2004; Sung, 2002; Amundsen, 1999; Shleifer & Vishny, 1993).

Corruption is considered an enduring political issue in the Philippines. For each administration that rules for six years, the country lost an average of $113.1 billion due to corruption (Balboa & Medalla, 2006). Studies that tackled the causes and consequences of corruption summarized this as a function of both personal and institutional factors. In terms of personal factors, people in power use the government budget to request favors from legislators (Nisaknen, 1971). At the institutional level, factors that stimulate corruption include lack of adequate legal framework and weak institutions (World Bank, 1992). These factors have been found to escalate bureaucratic corruption (Magtulis & Poquiz, 2017).

Various initiatives sought to develop indices to measure corruption in the public sector. Among these indices are the Corruption Perceptions Index (CPI) developed by Transparency International and the measurement developed by the United Nations Office on Drugs and Crime (UNODC), which counts the number of bribery charges as an indicator of corruption. The CPI gleans from third-party opinions and perceptions to measure the extent of corruption in the public sector. Other studies, such as Magtulis and Poquiz (2017), used the Economic Freedom Index by the Heritage Foundation and the World Bank's Worldwide Governance Indicators (WGI). The Economic Freedom Index had a strong reliance on the CPI data, while the WGI was based on several surveys conducted by both the national and international levels.

The difficulty of measuring corruption lies in the broadness of related practices (such as plunder, graft, bribery, etc.). Furthermore, international agencies' measures of corruption are largely based on perception and are hardly quantifiable. Nevertheless, the origins of the concept could be traced from Gordon Tullock (1967), who coined the term "rent-seeking." This phenomenon entails the increase of the utility maximizer's wealth without necessarily creating wealth. Public choice theory refers to this inefficient allocation of resources as non-Pareto optimal distribution, a market failure that warrants government response.

Corruption weakens moral bonds in a democratic society, and erodes trust in government (Brillantes & Fernandez, 2010). The damaging effects of corruption vary from blatant injustices in the courts, inequitable social services, weakened national institutions, economic inefficiencies to environmental exploitations (UNDP, 2008). Coronel and Kalaw-Tirol (2002) listed five consequences of corruption: bureaucratic inefficiency and demoralization, endangered public order and safety, worsened income equity and poverty, damaged political legitimacy and stunted democracy, and impeded economic growth. Several studies show a direct relationship between corruption and inequality and poverty (Negin et al., 2010; Ogboru & Abimiku, 2010; Gupta et al., 2002).

Former President Benigno Aquino III sums up this relationship into the phrase, "Kung walang corrupt, walang mahirap" ("If there is no corruption, no one will be poor") (Aquino, 2010).

The United Nations Development Program (UNDP) and the UN Convention Against Corruption (UNCAC) have implemented or supported accountability, transparency, and integrity (ATI) programs since 1997 (UNDP, 2005). In the Philippines, anti-corruption efforts range from studies determining its causes and consequences to legislation of policies strengthening institutions and enabling civil society.

In the Philippines, more than 40 anti-corruption laws and policies have been passed. These laws indicate the source of responsibility for enforcing these laws and defining corrupt practices and punishable acts. Brillantes and Fernandez (2008) enumerated some of these laws as follows: (1) Anti-Graft and Corrupt Practices Act or Republic Act (RA) 3019, (2) Revised Penal Code of 1930 (Act No. 3815), (3) Article XI of the 1987 Philippine Constitution, and (4) Anti-Red Tape Act (ARTA) of 2007 (RA 9485).

Meanwhile, anti-corruption agencies include the Office of the Ombudsman, which convened the Multi-Sectoral Anti-Corruption Council (MSACC) with civil society groups and the business sector to take part in the fight against corruption. Recently, the MSACC reviewed the gaps in the legislation about anti-corruption. The Presidential Anti-Graft Commission (PAGC), which supervises the implementation of Administrative Order 255, manages the moral renewal among the heads of the executive departments in their respective agencies. Other organizations are the Anti-Money Laundering Council (AMLC), National Bureau of Investigation (NBI), Supreme Court (SC), Commission on Audit (COA), Sandiganbayan, and the Civil Service Commission (CSC).

Civil society groups also advocate against corruption in the Philippines. The Transparency and Accountability Network (TAN), a coalition of civil society groups, aims to strengthen transparency and accountability in the government through

information exchange. This coalition consists of 21 organizations that seek to fight corruption and promote good governance.

Despite these laws and institutions, anti-corruption mechanisms remain weak. Brillantes and Fernandez (2010) noted that the country's problems and challenges are largely attributed to failures in governance, including corruption. Cariño and De Guzman (1979) identified the following strategies to strengthen anti-corruption initiatives: (1) ethics seminars or workshops to address moral lapses, and institution of rewards, purges, and variants; (2) management audit; (3) standardizing and elaborating rules and regulations; and (4) strengthening procedural reforms. Meanwhile, Mangahas (2009) proposed the following strategies: (1) reducing the scope of political appointments and insulating civil service from political intervention; (2) strengthening systems for sanctioning corrupt behavior; (3) rationalization of civil service compensation and incentive structure; (4) promoting a nonpolitical career civil service; (5) improving the judicial and legal system; and (6) strengthening rules and procedures in government transactions.

Mindsets, Values, and Behaviors in the Governance Reform Framework

Articulating the mindsets, values, and behavior dimension of the Governance Reform Framework (Brillantes & Perante-Calina, 2018) will help develop ethical mindsets and behaviors towards corruption in the public sector.

Mindset is defined as the individual's ability to perceive and understand the world through its underlying assumptions (McEwan & Schmidt, 2007). It is a psychological construct that supports the values, beliefs, and attitudes of an individual (Schein, 2017). It influences the individual's behaviors and actions, and their ability to learn (Dweck, 2006; Senge, 1990). It also strengthens the self-fulfilling effect on reality among individuals (Crum et al., 2011; Crum & Langer, 2007).

Individuals cannot easily avoid the influence of their subconscious mindset (Bohm & Edwards,

1991). A mindset influences future possible actions (Clifton, 2013).

Meanwhile, values are deeply ingrained moral beliefs or social representations that guide individual actions or behaviors. The relative importance assigned to a particular value is likely to differ among people. However, values, which are derived from internalizing sociocultural goals, guide self-regulation. Social life and values are thus linked together. Values are generally called the "social mind," made up of scripts or cultural ideas commonly held at the group level (Oyserman, 2002).

Definitions of the term "behavior" differ among perspectives in psychology. Behavior is defined as "an attempt on the part of an individual to bring about some state of affairs–either to effect a change from one state of affairs to another or to maintain a currently existing one" (Ossorio, 2006, p. 49).

Figure 1
Governance Reform Framework
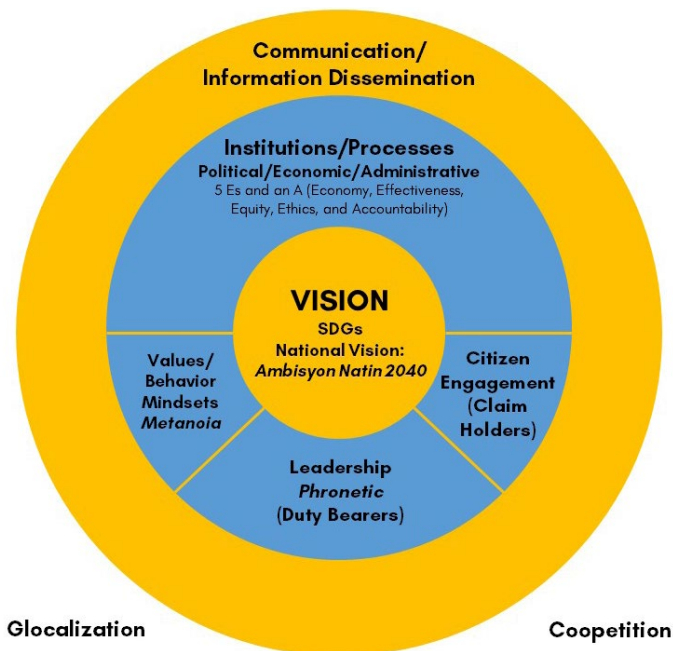
Note. Adapted from Brillantes and Perante–Calina (2018).

Changing the behaviors and mindsets of individuals is one of the most challenging imperatives in good governance, especially in countries with a strong traditional values system.

Changing mindsets also involves changing culture, particularly ideologies or worldviews (Brillantes & Fernandez, 2010). Individual mindsets include moral intelligence (integrity, honesty, compassion, and forgiveness), emotional intelligence (self and social awareness and mature behaviors), positive thinking and attitude, and work behaviors. Moreover, personal values help individuals conform to ethical matters and set meaningful goals for themselves. The collective mindset helps establish the model work culture, where high ethical standards are maintained (Pant, 2007).

Impact of the Governance Reform Framework on Sustainable Development Goals (SDGs)

Governance is directly related to sustainable development (Güney, 2017). In 2019, quality of governance in the Philippines has been consistently low through the years, with slight improvements in some areas (Table 1). Improving the elements of the Governance Reform Framework, particularly mindsets, values, and behavior, may help improve country performance in the governance indicators.

The so-called fifth paradigm of public administration, smart sustainable governance, encompasses principles of effectiveness (competence, sound-policymaking, and collaboration), inclusiveness (leaving no one behind, non-discrimination, participation, subsidiarity, and intergenerational equity), and accountability (integrity, transparency, and independent oversight) (Alberti, 2019). These principles and their underlying elements are important toward achieving the Sustainable Development Goals.

Proposed Model for Changing Behaviors and Mindsets about Corruption

This study attempted to create a model for changing the behaviors and mindsets about corruption (Figure 2). The model is derived from the social cognitive theory (Bandura, 1978, 1989), which involves imitation, retention, reproduction, and motivation. The model is also adapted from flexible mindset (Dweck, 2015) and the *kapwa* theory (Enriquez, 1994, 1978). It also gleans from the nudge theory (Thaler & Sunstein, 2009). Laws, policies, procedures, and educational intervention and capacity building activities also play an important role in this model.

Social Cognitive Theory

One of the most used theories for learning and changing behavior is the social cognitive theory. The first proponent of this theory was Albert Bandura (1978, 1989), who argued that people can learn and change their behaviors by observing and following exemplars. Bandura explained the interaction between personal factors, such as cognitive, affective, and biological phenomena, as well as behavior and environmental factors. Bandura called this relationship reciprocal determinism, which highlights the use of observations in learning and behavioral change.

Table 1

*Performance of the Philippines based on World Governance Indicators, by Percentile Rank*

Indicator	2013	2014	2015	2016	2017	2018	2019	2020	2021
Voice and accountability	48.83	52.71	51.23	51.23	48.77	48.28	47.29	41.1	39.61
Government effectiveness	59.24	61.06	57.21	51.92	51.92	55.29	54.81	56.7	57.69
Control of corruption	43.60	40.38	39.90	36.60	39.90	34.13	31.25	33.7	34.13
Rule of law	42.25	43.75	43.27	39.42	37.02	34.13	34.13	29.8	26.92
Regulatory quality	50.24	52.40	52.40	53.85	55.77	53.85	55.29	58.2	54.81
Political stability and absence of violence/ terrorism	16.11	21.90	19.52	9.52	11.43	12.86	16.67	20.8	16.98

Note. Data are from "ASEAN 10 performance in the Worldwide Governance Indicators, 2022 update," by the Congressional Policy and Budget Research Department (CPBRD), House of Representatives, 2022, *Facts in Figures*. Copyright 2022 by CPBRD, (https://cpbrd.congress.gov.ph/images/PDF%20 Attachments/Facts%20in%20Figures/FF2022-58_ASEAN_10_Performance_in_the_Worldwide_Governaance_Indicators_2022.pdf).

Following Bandura's (1989) theory, behavioral change involves the following stages: attention, retention, reproduction, and motivation. To influence the individual's reinforcement ability, perception, motivation and arousal levels, and sensory capacities, the individual must be attentive to the stimuli presented to him/her. Behavioral change thus begins with getting the learners' attention through the so-called nudging (Gilovich et al., 2000). If the learners are not attentive enough to imitate the behavior, they will not be able to process and commit to it as their own. The timing of presenting this behavior is also important for sustaining the learners' attention.

Figure 2
Model for Changing Behaviors and Mindsets
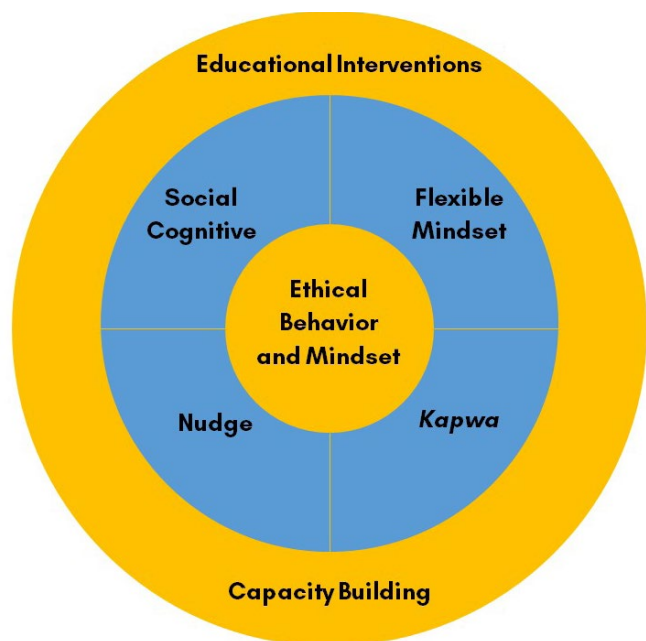
Note. Author's own interpretation.

Retention means holding the learner's observation through physical, verbal, and mental means. At this stage, ethical behavior needs to be practiced, at least occasionally, so that the information is fully assimilated to the learners. Positive reinforcement may help learners retain the behavior.

Reproduction is the actual practice or replication of the behavior that the learner wants to imitate. Capacity for replicating behaviors,

which may depend on the learners' existing skills and competencies, may be strengthened through workshops, training, role play, and simulation.

Motivation is the level of determination needed to imitate or perform the observed behavior. An individual who is attentive to an observed behavior will likely retain information based on his/her observation. In turn, the individual will be motivated to replicate the said behavior. That said, the models should manifest genuine or authentic positive behaviors for the individuals to imitate.

While extrinsic motivation can help change behaviors, intrinsic motivation was deemed more effective (Ryan & Deci, 2000). Deci and Ryan (2010, p. 1) state that "intrinsically motivated behaviors do not require external rewards; rather, they are an expression of a person's sense of who they are, of what interests them." Motivation, especially intrinsic motivation, can be enhanced through training and workshops, fostering ethical behavior and making organizations or institutions more accountable and efficient. It may not be necessary to directly teach individuals ethical behavior, especially at the attention and retention stages. Nudging may be applied in this regard (Thaler & Sunstein, 2009).

The behavior of role models also needs to be considered. Authentic modeling involves deeper and more personal resources. Improving the authenticity of the behavior to be modeled involves improving the models' mindsets.

Flexible Mindset

Individuals can consciously shift their mindsets as long as their ability and condition permits (Buchanan & Kern, 2017). These shifts likely lead to improved welfare and resilience (Vella-Brodrick, 2013). Small increments or shifts in mindset can lead to great changes in the system. The crux of creating the personal and whole-system change lies in the people's openness to change (Scharmer, 2009; Brown, 2005; Hochachka, 2005).

Openly embracing ethical behaviors requires flexible mindsets (Dweck, 2015). Adopting a

mechanism that helps instill a flexible mindset will likely help citizens and leaders change their behaviors about corruption.

Kapwa Theory

The concept of kapwa, or shared identity, was introduced by Virgilio Enriquez (1994, 1978), the father of Philippine psychology. Enriquez emphasized that kapwa is the heart of Filipino values. He found that treating others as kapwa, that is, fellow human beings with shared goals, aspirations, and identity, is what most Filipinos are concerned about, more than merely establishing smooth relationships.

The concept of kapwa is categorized as *ibang-tao* (outsider) and *hindi-ibang-tao* ("one-of-us"). An individual may be in any one of these categories when they interact with others. The level of interaction depends on how one is being put into these categories. For instance, if an individual is considered as ibang-tao, the social interaction can be characterized from *pakikitungo* (transaction/civility with), to *pakikisalamuha* (interaction with), to *pakikilahok* (joining/participating), to *pakikibagay* (in conformity with/in accord with), and to *pakikisama* (being along with). If an individual is regarded as hindi-ibang-tao, the social interaction can be characterized as *pakikipagpalagayang-loob* (being in-rapport/understanding/acceptance with), to *pakikisangkot* (getting involved), to *pakikiisa* which is the highest level (being one with us) (Pe-Pua & Protacio-Marcelino, 2000).

Allowing social interactions to reach the category of hindi-ibang-tao ("one-of-us") is essential in teaching ethical behaviors and mindsets. In this way, teaching will be authentic, and behavioral change will likely be attained. Reaching this category also reinforces empathy (Olson, 2013; Ioannidou & Konstantikaki, 2008) and eliminates cognitive dissonance, the inconsistency between thoughts, beliefs, attitudes, and behaviors (Festinger, 1962; Festinger, 1957; Brehm & Cohen, 1962).

According to Alfiler (1998), kapwa can establish norms about the use of power with respect to dignity among individuals. Applying kapwa in organizations motivates others to perceive others as kapwa-tao, "a person [to whom] they must show respect, serve with utmost courtesy, and provide quality service" (Alfiler, 1998, p. 130). This integration leads to the responsible use of power, helps fight corruption, and improves public accountability and transparency.

Interpersonal relationships may extend in formal transactions inside the organization. If every individual feels responsible for their kapwa-tao and if they believe that when they effectively and efficiently do their tasks, they will learn to do it also for the sake of others. Concern for kapwa-tao encourages quality and accountable public service to the Filipino people (Alfiler, 1998).

Nudge

Nudge is defined as "any aspect of the choice architecture that alters people's behavior in a predictable way, without forbidding any options or significantly changing their economic incentives" (Thaler & Sunstein, 2008, p. 6). To direct people's behavior in specific directions in a predictable way, there is a need to alter and design their environment. For instance, putting healthy food options at eye level in the cafeteria would likely entice customers to buy these options (Arno & Thomas, 2016). Another example is the default option on organ donation and its underlying opt-out system. Depending on the predictable behavior of the donors, this strategy will likely increase the number of potential donors (Rithalia et al., 2009).

Visual applications of nudge include putting pictures on cigarette packs and street signs, which elicit emotional responses to reduce cigarette consumption and accident risk (Fong et al., 2009; Carlson et al., 2009). Nudge can be used in the Philippine bureaucracy, especially in dealing with corruption, without unnecessarily forcing ethical behaviors on civil servants. Displaying large, eye-catching posters about the causes and consequences of corruption is one of the ways to discourage this behavior in government offices (Köbis et al., 2019). However, Schmidt and Engelen (2020) recommended that an appropriate

institutional framework compatible with existing laws and policies must be established to effectively encourage ethical behavior in public organizations.

Educational Interventions

Using behavioral science interventions in schools helps young individuals develop the right attitudes, habits, and values to grow into good citizens. More behavioral science education interventions should be introduced into the college curriculum, internship programs, and extracurricular activities, in cooperation with schools of public administration and governance. This and other similar interventions may help students polish their skills that they can use after they graduate.

Capacity Building

Preskill and Boyle (2008) highlighted the need to strengthen corruption knowledge generation through capacity building. These initiatives need to be incorporated into national and local governments, organizations, sectors, and stakeholders to improve their understanding of corruption and to strengthen anti-corruption programs. Design thinking, complexity thinking, critical thinking, futures thinking, deliberative skills, and emotional intelligence are among the new skills that public sector organizations and other actors involved in anti-corruption initiatives need to acquire (UNCEPA, 2019).

Connection of Mindsets, Values, and Behavior to the Other Dimensions of the Governance Reform Framework

Improving mindsets, values, and behavior using behavioral science approaches could improve other dimensions of the Governance Reform Framework, which includes reforms in institutions, processes, and procedures (Manning & Parison, 2003). Institutions are "humanly devised constraints that structure human interaction" (North, 1994, p. 360). In political, economic, and social interactions, institutions are both formal and informal constraints. By providing incentives and disincentives for them to act, institutions alter human behavior. That said, good institutions must establish a sound incentive system to reduce uncertainty and improve economic performance (North, 2005; Chang, 2005).

Improved mindsets, values, and behavior will likely lead to greater appreciation for bureaucratic reforms, since people would have then embraced the benefits of the changes in the system. However, institutional change does not necessarily result in the desired outcome. Alberti (2019) noted that underlying values and belief systems that constitute the institutions may strengthen or undermine reform efforts. Explaining the iceberg paradigm, Alberti (2019) argues the primacy of values, behaviors, and mindsets over external norms and rules.

Improving this dimension can also help strengthen the leadership dimension, particularly phronetic leadership, to address corruption. Phronetic leadership helps uphold ethics and accountability, and it makes the system more productive and efficient. Behavioral change can also improve citizen engagement. Inducing the demand for good governance promotes an objective policymaking process (Chene, 2008). To participate in the governance process, citizens must actively share their ideas and ownership of the country's welfare. In this way, civil society engagement represents the "voice" in good governance and strengthens public sector accountability and service delivery (Brillantes & Fernandez, 2010). Citizen engagement in governance will be even more emphasized once there will be an improvement of individual mindsets, values, and behavior, and reforms in the institutions, processes, and procedures.

Integrating Behavioral Science Approaches in PA Subfields

Various applications of behavioral science in public administration abound in its subfields. These include public policy, organizational management, public sector bureaucracy and administration, and e-governance.

Scholars from the Behavioral Insights Team in the United Kingdom studied the use of behavioral science approaches to shape public policies (see Hallsworth et al., 2018). These insights were drawn

from heuristics (mental shortcuts) and automatic responses that affect decision making. The team used experiments, surveys, and other research methods to validate theories and assumptions.

In the field of organization and management, scholars adapted theories from work and organizational psychology to study public service motivation (Resh et al., 2018; Bakker, 2015; Bellé, 2015; Wright, 2004). Oslen's (2015) study used framing experiments to explore how satisfaction affects citizens' perceptions about government services. In bureaucracy and administration, applications of behavioral science approaches in PA include the studies of Kaufmann and Feeney (2014) and Riccucci et al. (2014). Van Ryzin's (2011) research used theories in psychology to examine factors influencing public trust, fairness, and equity in service delivery. Meanwhile, Grimmelikhuijsen and Meijer (2014) used psychological theories to investigate the influence of prior knowledge and trust in government on the relationship between trust and transparency.

Behavioral science applications in e-governance include research by Drigas et al. (2011) and Turnip et al. (2018). The latter explored the skills needed for using ICT tools in the bureaucracy. Findings revealed that attitudes of civil servants, and the ease of use and perceived usefulness of ICT tools influenced e-governance adoption.

Integration of Behavioral Science Approaches in the Philippine Bureaucracy

Adopting behavioral science approaches in the study and practice of PA needs to consider the country's condition. According to Khadzhyradieva et al. (2019), the choice of the organizational structures may affect how behavioral insights are applied in public policy. Capacity-building programs for professionals generating these insights may help build knowledge, practice, and competencies in the field. Their roles in public sector organizations also need to be clearly defined, and, as professionals, they need to be guided by certain norms and rules (Khadzhyradieva et al., 2019).

Future Directions of Behavioral Science in Philippine Public Administration

Various scholars highlighted strategies that point to future directions of behavioral science approaches in PA, particularly in the Philippine bureaucracy. Local literature averred that behavioral science, through its application in development studies, can help in the long term (Munarriz, 1987), particularly in advancing the principles of public administration (Pilar, 1982).

Collaborative work characterizes much of the research done in other countries, whic can be considered by local practitioners to reinforce the integration of PA and behavioral science. For instance, Kim et al. (2012) worked together on public service motivation research with other practitioners. Other scholars replicated studies on performance information (George et al., 2017), representative bureaucracy (Riccucci et al., 2016), and co-production (Andersen et al., 2020). Meanwhile, other scholars (Villadsen & Wulff, 2018; Jilke et al., 2018; Baekgaard, 2017; Baekgaard et al., 2019) studied the link between institutional contexts and behavioral change using micro and macro perspectives.

In terms of research method, Tummers (2020) noted that PA research integrating behavioral science approaches is mainly experimental. However, the methods used may vary depending on the nature of research questions and the magnitude of the situational problem. Research may use different techniques with stable psychometric properties (Rosenfeld et al., 2016). Recently, studies have used prediction methods using machine learning to analyze social problems (Anastasopoulos & Whitford, 2018; Kleinberg et al., 2018).

Conclusion

This study addresses and contributes to the discussion regarding the possible avenues to change individual mindsets and behaviors, particularly on corruption, which remains a complex domestic problem.

Researchers created a model adapted from behavioral science theories as a guide for

behavioral change programs in the public sector. This model will help individuals learn ethical behaviors and mindsets. The model is not linear, given that corrupt behaviors are not linear in reality. Confounding variables could affect the behavioral change in the real-world setting. This study also recommends training and capacity-building activities on the use of behavioral insights in PA.

Improving the mindsets, values, and behavior dimension will have a positive spillover effect on the other dimensions of the Governance Reform Framework (Brillantes & Perante-Calina, 2018), such as institutions, procedures, and processes; leadership; and citizenship engagement. Reforms in these areas will help reinforce the principles of effectiveness, inclusiveness, and accountability.

References

Alberti, A. (2019). *Building institutional capacity to implement the 2030 Agenda and the Sustainable Development Goals* [Presentation]. UN Public Administration Program.

Alfiler, M. C. P. (1998). *Philippine administrative system*. The UP Open University.

Amundsen, I. (1999). *Political corruption: An introduction to the issues*. Chr. Michelsen Institute.

Anastasopoulos, L. J., & Whitford, A. B. (2019). Machine learning for public administration research, with application to organizational reputation. *Journal of Public Administration Research and Theory*, *29*(3), 491–510.

Andersen, S. C., Nielsen, H. S., & Thomsen, M. K. (2020). How to increase citizen coproduction: Replication and extension of existing research. *International Public Management Journal*, *23*(5), 696–712.

Aquino, Benigno III S. (2010). *Talumpati sa Pagtanggap ng Tungkulin ng Kagalang-galang na Benigno S. Aquino III, Pangulo ng Pilipinas* (Inaugural Address of His Excellency Benigno S. Aquino III, President of the Philippines). Quirino Grandstand, Rizal Park, Manila. June 30, 2010. http://www.gov.ph/2010/06/30/inauguraladdress-of-his-excelle ncy-benigno-s-aquino-iii/.

Asian Development Bank. (1998). *Anticorruption*. Asian Development Bank. http://hdl.handle.net/11540/2978. License: CC BY 3.0 IGO.

Arno, A., & Thomas, S. (2016). The efficacy of nudge theory strategies in influencing adult dietary behavior: A systematic review and meta-analysis. *BMC Public Health*, *16*(1), 1–11.

Baekgaard, M. (2017). Prospect theory and public service outcomes: Examining risk preferences in relation to public sector reforms. *Public Administration*, *95*(4), 927–942.

Baekgaard, M., Christensen, J., Dahlmann, C. M., Mathiasen, A., & Petersen, N. B. G. (2019). The role of evidence in politics: Motivated reasoning and persuasion among politicians. *British Journal of Political Science*, *49*(3), 1117–1140.

Bakker, A. B. (2015). A job demands-resources approach to public service motivation. *Public Administration Review*, 75(5), 723–732.

Balboa, J., & Medalla, E. M. (2006, May 23–24). *Anti-corruption and governance: The Philippine experience*. Paper presented at the APEC Study Center Consortium Conference, Ho Chi Minh, Vietnam.

Bandura, A. (1978). The self-system in reciprocal determinism. *American Psychologist*, *33*, 344–358.

Bandura, A. (1989). Social cognitive theory. In R. Vasta (Ed.), *Annals of child development* (Vol. 6, pp. 1–60). Jai Press Ltd.

Bellé, N. (2015). Performance-related pay and the crowding out of motivation in the public sector: A randomized field experiment. *Public Administration Review*, *75*(2), 230–241.

Bohm, D., & Edwards, M. (1991). *Changing consciousness: Exploring the hidden source of the social, political, and environmental crises facing our world*. Harper San Francisco.

Bonotan, A. M., & Lapiz, G. B. (2015). The school directors' innovativeness, political skills, and integrity: Towards policy framework for agenda-setting. *Philippine Journal of Public Administration, 59(1)*, 59–80.

Brehm, J. W., & Cohen, A. R. (1962). *Explorations in cognitive dissonance*. John Wiley & Sons Inc.

Bretschneider, S., & Straussman, J. (1992). Statistical laws of confidence versus behavioral response: How individuals respond to public management decisions under uncertainty. *Journal of Public Administration Research and Theory*, *2*(3), 333–345.

Brillantes, A., Jr., & Fernandez, M. T. (2008). Is there Philippine public administration: Or better still, for whom is Philippine public administration? *Philippine Journal of Public Administration*, *52*(2-4), 245–307.

Brillantes A., Jr., & Fernandez, M. T. (2010). Toward a reform framework for good governance: Focus on anti-corruption. *Philippine Journal of Public Administration*, *54*(1–2), 87–127.

Brillantes, A., Jr., & Perante-Calina, L. (2018). Leadership and public sector reform in the Philippines. In *Leadership and Public Sector Reform in Asia* (Public Policy and Governance, Vol. 30) (pp. 151–178). Emerald Publishing Limited.

Brown, B. (2005). Theory and practice of integral sustainable development. *AQAL Journal of Integral Theory and Practice*, *1*(2), 2–39.

Buchanan, A., & Kern, M. L. (2017). The benefit mindset: The psychology of contribution and everyday leadership. *International Journal of Wellbeing*, *7*(1).

Buchanan, B. (1974). Government managers, business executives, and organizational commitment. *Public Administration Review*, *34*(4), 339–347.

Bussell, J. (2015). Typologies of corruption: A pragmatic approach. In *Greed, corruption, and the modern state* (pp. 21–45). Edward Elgar Publishing.

Carlson, P. J., Park, E. S., & Andersen, C. K. (2009). Benefits of pavement markings: A renewed perspective based on recent and ongoing research. *Transportation Research Record*, *2107*(1), 59–68.

Chang, H. (2005). *Understanding the relationship between institutions and economic development–some key theoretical issues*. Article prepared for the WIDER Jubilee Conference on WIDER Thinking Ahead: The Future of Development Economics, Helsinki, 17–18 June.

Chang, E. C., & Chu, Y. H. (2006). Corruption and trust: Exceptionalism in Asian democracies? *The Journal of Politics*, *68*(2), 259–271.

Cooke, B., Diop, B. Z., Fishbane, A., Hayes, J., Ouss, A., & Shah, A. (2018). *Using behavioral science to improve criminal justice outcomes*. University of Chicago Crime Lab Report.

Clifton, J. (2013). *Thirteen Universal Assessments Which May Contribute to the 'Good Life.'* https://repository.upenn.edu/mapp_capstone/41.

Coronel, S. S., & Kalaw-Tirol, L. (2002). *Investigating corruption: A do-it-yourself guide*. Philippine Center for Investigative Journalism.

Crum, A. J., Corbin, W. R., Brownell, K. D., & Salovey, P. (2011). Mind over milkshakes: Mindsets, not just nutrients, determine ghrelin response. *Health Psychology*, *30*(4), 424.

Crum, A. J., & Langer, E. J. (2007). Mind-set matters: Exercise and the placebo effect. *Psychological Science*, *18*(2), 165–171.

Deci, E. L., & Ryan, R. M. (2010). Intrinsic motivation. *The Corsini Encyclopedia of Psychology*, 1–2.

Desta, Y. (2006). Designing anti-corruption strategies for developing countries: A country study of Eritrea. *Journal of Developing societies*, *22*(4), 421–449.

Downs, A. (1967). *Inside Bureaucracy*. Waveland Press.

Dweck, C.S. (2015). Carol Dweck revisits the growth mindset. *Education Week*, *35*(5), 20–24.

Dweck, C. S. (2006). *Mindset: The new psychology of success*. Random House.

Enriquez, V.G. (1994). *Pagbabangong-dangal: Psychology and Cultural Empowerment*. Akademya ng Kultura at Sikolohiyang Pilipino.

Enriquez, V.G. (1978). Kapwa: A core concept in Filipino social psychology. *Philippine Social Sciences and Humanities Review*, *42* (1–4).

Fazekas, M., & Tóth, I. J. (2016). From corruption to state capture: A new analytical framework with empirical applications from Hungary. *Political Research Quarterly*, *69*(2), 320–334.

Festinger, L. (1957). *A theory of cognitive dissonance* (Vol. 2). Stanford University Press.

Festinger, L. (1962). Cognitive dissonance. *Scientific American*, *207*(4), 93–106.

Fong, G. T., Hammond, D., & Hitchman, S. C. (2009). The impact of pictures on the effectiveness of tobacco warnings. *Bulletin of the World Health Organization*, *87*, 640–643.

George, B., Desmidt, S., Nielsen, P. A., & Baekgaard, M. (2017). Rational planning and politicians' preferences for spending and reform: Replication and extension of a survey experiment. *Public Management Review*, *19*(9), 1251–1271.

Gerring, J., & Thacker, S. C. (2004). Political institutions and corruption: The role of unitarism and parliamentarism. *British Journal of Political Science*, 295–330.

Gilovich, T., Medvec, V. H., & Savitsky, K. (2000). The spotlight effect in social judgment: an egocentric bias in estimates of the salience of one's own actions and appearance. *Journal of Personality and Social Psychology*, *78*(2), 211.

Grimmelikhuijsen, S. G., & Meijer, A. J. (2014). Effects of transparency on the perceived trustworthiness of a government organization: Evidence from an online experiment. *Journal of Public Administration Research and Theory*, *24*(1), 137–157.

Grimmelikhuijsen, S., Jilke, S., Olsen, A. L., & Tummers, L. (2017). Behavioral public administration: Combining insights from public administration and psychology. *Public Administration Review*, *77*(1), 45–56.

Güney, T. (2017). Governance and sustainable development: How effective is governance? *The Journal of International Trade & Economic Development*, *26*(3), 316–335.

Gupta, S., Davoodi, H., & Alonso-Terme, R. (2002). Does corruption affect income inequality and poverty?. *Economics of Governance*, *3*(1), 23–45.

Hallsworth, M., Egan, M., Rutter, J., & McCrae, J. (2018). Behavioural government: Using behavioural science to improve how governments make decisions. The Behavioral Insights Team.

Hochachka, G. (2005). Developing sustainability, developing the self: An integral approach to international and community development. Drishti Center for Integral Action.

Ioannidou, F., & Konstantikaki, V. (2008). Empathy and emotional intelligence: What is it really about? *International Journal of Caring Sciences*, *1*(3), 118.

Jilke, S., Van Dooren, W., & Rys, S. (2018). Discrimination and administrative burden in public service markets: Does a public–private difference exist? *Journal of Public Administration Research and Theory*, *28*(3), 423–439.

Kaufmann, W., & Feeney, M. K. (2014). Beyond the rules: The effect of outcome favourability on red tape perceptions. *Public Administration*, *92*(1), 178–191.

Khadzhyradieva, S., Hrechko, T., & Smalskys, V. (2019). The institutionalization of Behavioural Insights in Public Policy. *Public Policy and Administration*, *18*(3), 95–113.

Khuriyatul, H., Bevaola, K., & Agus, P. (2019). Building a network concept in contemporary public administration. *Public Administration Issues* (Special Issue 1), 46–61.

Kim, S., Vandenabeele, W., Wright, B. E., Andersen, L. B., Cerase, F. P., Christensen, R. K., Desmarais, C., Koumenta, M., Leisink, P., Liu, B., Palidauskaite, J., Pedersen, L. H., Perry, J. L., Ritz, A., Taylor, J., & De Vivo, P. (2012). Investigating the structure and meaning of public service motivation across populations: Developing an international instrument and addressing issues of measurement invariance. *Journal of Public Administration Research and Theory*, *23*(1), 79–102.

Kleinberg, J., Lakkaraju, H., Leskovec, J., Ludwig, J., & Mullainathan, S. (2018). Human decisions and machine predictions. *The quarterly journal of economics*, *133*(1), 237–293.

Köbis, N. C., Troost, M., Brandt, C. O., & Soraperra, I. (2019). Social norms of corruption in the field: Social nudges on posters can help to reduce bribery. *Behavioral Public Policy*, 1–28.

Liu, X., Stoutenborough, J., & Vedlitz, A. (2017). Bureaucratic expertise, overconfidence, and policy choice. *Governance*, *30*(4), 705–725.

Magtulis, P. P., & Poquiz, J. L. (2017). Big government, big corruption? Examining the relationship between government size and public corruption in the Philippines. *International Journal of Public Administration*, *40*(11), 954–967.

Manning, N., & Parison, N. (2003). *International public administration reform: Implications for the Russian Federation*. The World Bank.

Manzetti, L., & Wilson, C. J. (2007). Why do corrupt governments maintain public support? *Comparative Political Studies*, *40*(8), 949–970.

Munarriz, M. T. (1987). Some theoretical considerations on behavioral changes and their use in housing project evaluation. *Philippine Journal of Public Administration*, *31*(4), 453–462.

McEwen, C. A., & Schmidt, J. D. (2007). Leadership and the corporate sustainability challenge: Mindsets in action. *Available at SSRN 1118071*.

Nawaz, F., & Bridi, A. (2008). Overview of corruption and anti-corruption in the Philippines. *U4 Expert Answer*, *4*(1).

Negin, V., Abd Rashid, Z., & Nikopour, H. (2010). *The causal relationship between corruption and poverty: A panel data analysis*.

Nisaknen, W. (1971). *Bureaucracy and representative government*. Aldine-Atherton.

NEDA. (2017). *World Government Indicators*. http://governance. neda.gov.ph /?p=879.

North, D. C. (1994). Economic performance through time. *The American Economic Review*, *84*(3), 359–368.

North, D. C. (2005). Institutions, Journal of Economic Perspectives, 5 (1), Winter, 97–112. *International Library of Critical Writings in Economics*, *186*(1), 387.

Ogboru, I., & Abimiku, A. C. (2010). *The impact of corruption on poverty reduction efforts in Nigeria*, Paper Presented at the Annual National Economic Society (NES) conference.

Olsen, A. L. (2015). "Simon Said," We Didn't Jump. *Public Administration Review*, *2*(75), 325–326.

Olsen, A. L., Hjorth, F., Harmon, N., & Barfort, S. (2019). Behavioral dishonesty in the public sector. *Journal of Public Administration Research and Theory*, *29*(4), 572– 590.

Olsen, A. L., Tummers, L., Grimmelikhuijsen, S., & Jilke, S. (2018). Behavioral public administration: Connecting psychology with European public administration research. In *The Palgrave Handbook of Public Administration and Management in Europe* (pp. 1121–1133). Palgrave Macmillan.

Olson, G. (2013). *Empathy Imperiled: Capitalism, culture, and the brain*. Springer.

Ossorio, P. G. (2006). *The behavior of persons*. Descriptive Psychology Press.

Oyserman, D. (2002). *Values: psychological perspectives*. Elsevier Science Ltd.

Pant, D. (2007). Revolutionizing the mindsets: Roles and challenges for management development institutions in governance reform context. *Administration and Management Review*, *19*(2), 77–96.

Pe-Pua, R., & Protacio-Marcelino, E. A. (2000). Sikolohiyang Pilipino (Filipino psychology): A legacy of Virgilio G. Enriquez. *Asian Journal of Social Psychology*, *3*(1), 49–71.

Pilar, N. N. (1982). The relevance of the New PA in Philippine public administration. *Philippine Journal of Public Administration*, *26*(3–4), 228–234.

Preskill, H., & Boyle, S. (2008). A multidisciplinary model of evaluation capacity building. *American journal of evaluation*, *29*(4), 443–459.

Resh, W. G., Marvel, J. D., & Wen, B. (2018). The persistence of prosocial work effort as a function of mission match. *Public Administration Review*, *78*(1), 116–125.

Raadschelders, J. C. (2011). The future of the study of public administration: Embedding research object and methodology in epistemology and ontology. *Public Administration Review*, *71*(6), 916–924.

Riccucci, N. M., Van Ryzin, G. G., & Lavena, C. F. (2014). Representative bureaucracy in policing: Does it increase perceived legitimacy?. *Journal of Public Administration Research and Theory*, *24*(3), 537–551.

Riccucci, N. M., Van Ryzin, G. G., & Li, H. (2016). Representative bureaucracy and the willingness to coproduce: An experimental study. *Public Administration Review*, *76*(1), 121–130.

Rithalia, A., McDaid, C., Suekarran, S., Myers, L., & Sowden, A. (2009). Impact of presumed consent for organ donation on donation rates: A systematic review. *British Medical Journal*, *338*.

Rose–Ackerman, S. (2008). "*Corruption*," Springer Books, in: Readings in Public Choice and Constitutional Political Economy, chapter 30, pages 551–566, Springer.

Rosenfeld, B., Imai, K., & Shapiro, J. N. (2016). An empirical validation study of popular survey methodologies for sensitive questions. *American Journal of Political Science*, *60*(3), 783–802.

Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, *55*(1), 68–78.

Scharmer, C. O. (2009). *Theory U: Learning from the future as it emerges*. Berrett-Koehler Publishers.

Schein, S. (2017). *A new psychology for sustainability leadership: The hidden power of ecological worldviews*. Routledge.

Schmidt, A. T., & Engelen, B. (2020). The ethics of nudging: An overview. *Philosophy Compass*, *15*(4), e12658.

Schott, R. L. (1986). The psychological development of adults: Implications for public administration. *Public Administration Review*, *46*(6), 657–667.

Senge, P. (1990). *The fifth discipline: The art and practice of the learning organization*. Currency Doubleday.

Shafran, J., Jones, B. D., & Dye, C. (2020). Bounded Rationality in Public Administration. In *Oxford Research Encyclopedia of Politics*. https://oxfordre.com/politics/view/10.1093/acrefore/9780190228637.001.0001/acrefore-9780190228637-e-1460.

Shleifer, A., & Vishny, R. W. (1993). Corruption. *The Quarterly Journal of Economics*, *108*(3), 599–617.

Simon, H. A. (1976). *Administrative behavior: A study of decision-making processes in administrative organizations* (3rd Edition). The Free Press.

Simon, H. A. (1978). *Rational decision-making in business organizations*. Prize Lecture to the memory of Alfred Nobel, 8 December.

Simon, H. A. (1972). Theories of bounded rationality. *Decision and Organization*, *1*(1), 161–176.

Sung, H. E. (2002). A convergence approach to the analysis of political corruption: A cross-national study. *Crime, Law and Social Change*, *38*(2), 137–160.

Tapales, P., Enriquez, V. G., & Trinidad, O. S. (1995). Value profile and corruption propensity: Correlates among employees in two types of government agencies. *Philippine Journal of Public Administration*, *39*(4), 407–433.

Thaler, R. H., & Sunstein, C. R. (2009). *Nudge: Improving decisions about health, wealth, and happiness*. Penguin.

The World Bank (1992). Adjustment lending and mobilization of private and public resources for Growth Country Economics Department. *Policy and Research Series* (Vol. 22). The World Bank.

Tullock, G. (1967). The welfare costs of tariffs, monopolies, and theft. *Western Economic Journal*, *5*(3), 224–232.

Tummers, L. (2020). Behavioral public administration. In *Oxford Research Encyclopedia of Politics*.

United Nations Development Programme (India) (2008). *Tackling corruption, transforming lives: Accelerating human development in Asia and the Pacific*. Macmillan India Ltd.

UNDP (2005). *Institutional Arrangements to Combat Corruption. A Comparative Study*. Keen Publishing (Thailand) Co. Ltd.

Van Ryzin, G. G. (2011). Outcomes, process, and trust of civil servants. *Journal of Public Administration Research and Theory*, *21*(4), 745–760.

Vella-Brodrick, D. A. (2013). Positive psychology interventions: Research evidence, practical utility, and future steps. In *Mental Well-Being* (pp. 331–353). Springer, Dordrecht.

Villadsen, A. R., & Wulff, J. N. (2018). Is the public sector a fairer employer? Ethnic employment discrimination in the public and private sectors. *Academy of Management Discoveries*, *4*(4), 429–448.

Waldo, D. (1948). *The administrative state: A study of the political theory of American public administration*. Ronald.

White, R. D., Jr. (1999). Are women more ethical? Recent findings on the effects of gender upon moral development. *Journal of Public Administration Research and Theory*, *9*(3), 459–472.

World Bank. (1997). *World Development Report 1997*, The World Bank.

Worldwide Governance Indicators 2022 Update. (2022). https://cpbrd.congress.gov.ph/images/PDF%20Attachments/Facts%20in%20Figures/FF2022-58_ASEAN_10_Performance_in_the_Worldwide_Governaance_Indicators_2022.pdf

Wright, B. E. (2004). The role of work context in work motivation: A public sector application of goal and social cognitive theories. *Journal of Public Administration Research and Theory*, *20*, 14(1), 59–78.