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Is Data-Driven Decision Making At Odds With Moral Decision Making? A Critical Review of School Leaders' Decision Making in the Era of School Accountability

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Abstract

This article provides a critical review of school leaders' data-driven decision making (DDDM), drawing attention to the potential tension between DDDM and moral decision making. With mounting accountability in education, DDDM has been espoused as one of the core values in school leadership. Making a data-driven decision means that school leaders use data to set goals, identify problems, seek and evaluate options, and choose a course of action; whereas moral decision making is about deciding what is right, just, virtuous, and ethical. The two decision-making approaches could be on a collision course if school leaders are situated in an organizational context in which leaders, teachers, and students have competing interests. This article draws upon literature on decision making in multiple disciplines (e.g., psychology, behavioral economics, and cognitive neuroscience) to discuss the potential tension between DDDM and moral decision making. The article concludes with recommendations for school leaders' decision making.

Introduction

Amid the backdrop of mounting accountability in education, DDDM has been espoused as one of the core values in school leadership. Since the 1960s, prevalent decision-making approaches in educational leadership literature have been DDDM, moral decision making, shared decision making, and contingency decision making (Wang, 2019b). Most literature on these decision-making approaches runs in parallel with scant attention to the potential tension between one another (DeMatthews & Serafini, 2019; Frick, Fairecloth, & Little, 2013; Greenfield Jr., 2004). Given the prominence of DDDM and moral decision making in educational leadership literature, this article focuses on the potential tension between DDDM and moral decision making. Making decisions through a data-driven approach means that school leaders use data to set goals, identify problems, seek and evaluate options, and choose a course of action; whereas moral decision making is about deciding what is right, just,

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virtuous and ethical (Ellemers, van der Toorn, Paunov, & van Leeuwen, 2019). The two decision-making approaches could collide if school leaders are situated in an organizational context in which leaders, teachers, and students have competing interests. This article, therefore, subjects leaders' DDDM to a critical assessment, drawing attention to the potential tension between DDDM and moral decision making.

Data-Driven Decision Making

Decision making refers to choosing a course of action from a set of options. Data-driven decision making (DDDM) highlights the salient role of data in decision making. Specifically, DDDM is comprised of six steps, including (1) collecting and (2) organizing raw data which can be converted into information; (3) analyzing and (4) summarizing information which can be transformed into usable, applicable knowledge; (5) synthesizing and (6) prioritizing the information to develop a set of options from which decision makers select a choice and reach a decision (Mandinach, Honey, & Light, 2006).

DDDM has become a prevailing decision-making approach championed by school leaders and policymakers. The No Child Left Behind (NCLB, 2001) and the Every Student Succeeds Act (ESSA, 2015) ushered in an era of mounting accountability in education. Accountability sets the expectation that one may be called on to justify one's decisions (Lerner & Tetlock, 1999); therefore, accountability creates an organizational context that influences leaders' decision making in a substantial manner by raising stakes for decision makers (Arkes, 1991; Tetlock, 1985). When schools are held accountable for student learning and achievement, school leaders are rewarded if they provide compelling justifications for their decisions that lead to an improvement in student learning and achievement. By contrast, school leaders bear adverse ramifications—such as an unfavorable job evaluation which might hamstring a leader's career prospects—if they fail to provide a satisfactory justification for their decision. In the school accountability system, school leaders use data to assess teacher instruction and student learning to inform decisions on curriculum and instruction (Leithwood, Aitken, & Jantzi, 2001; Luo, 2008; Park, 2018; Rigby, 2016). School leaders use standards-based assessment data to identify low performance by race/ethnicity (Roegman, Samarapungavan, Maeda, & Johns, 2018; Wang, 2017). School leaders use the data that indicate poor attendance and enrollment, low standardized test scores, and "Academically Unacceptable" ranking in state accountability system to justify the decision of closing a high school (Khalifa, Jennings, Briscoe, Oleszweski, & Abdi, 2014). The District of Columbia Public Schools' (2011) statement "Our decisions at all levels must be guided by robust data" (p. 1) was a vocal, unswerving commitment to DDDM espoused by many school leaders. Being data-driven, school leaders believe data are key to their decision making. As a corollary, teachers and school

leaders build data walls, schools develop data teams, and districts hire data analysts. In the era of school accountability, DDDM is an appealing decision-making approach for leaders.

Despite the merits, DDDM is ambiguous about the decision-making process that starts with data and ends with a decision. DDDM emphasizes the salient role of data in decision making in broad strokes, but does not provide specific, practical principles a school leader can follow to reach a decision. For example, in the above mentioned six-step DDDM process (Mandinach et al., 2006), three concepts were differentiated: data have no meaning in themselves; information connects data to the context; knowledge is the applicable information guiding decision making. Yet DDDM is ambiguous about how data are converted into information, and how the information is transformed into knowledge that guides decision making. The ambiguity of DDDM can confuse school leaders when they have insufficient skills in (1) knowing which data to consider for the decision at hand, (2) having access to the data in a timely, cost-effective manner, (3) being well-versed in data analytical models, and (4) being capable of interpreting data accurately and then converting data to information and knowledge. In fact, even statisticians sometimes make erroneous decisions using DDDM (Kahneman, 2011), let alone school leaders who might not know how all the nuances of data collection and analysis influence data interpretation. The ambiguity of DDDM thus poses constraints for school leaders to make wise decisions.

Moreover, DDDM falls short of guiding school leaders' decision making when they are confronted with competing interests. DDDM aims to "maximize student achievement of all students" (Van Geel et al., 2016, p. 362). To do so, data are used to monitor the outcome of instruction, evaluate the extent to which goals have been achieved, and provide interventions accordingly. Data are the means to an end of decision making—the maximized achievement of all students. A looming concern is: What if there is a tension between leaders' self-interest (e.g., to advance the leader's career as fast as possible) and the collective group interest of the teachers and students (e.g., additional time and resources are needed to achieve quality teaching and learning)? Also imagine a school leader who has finite resources that can be allocated to meet the learning needs of a fixed number of students. Should the leader allocate the resources to low-performing students whose academic achievement might not yield a substantial improvement in the school rating in state accountability system in the short term, or to those students who have a better chance of passing the state assessment and giving the school rating a solid grounding at the end of school year (Booher-Jennings, 2005)? When school leaders supervise special education programs and services, should the leaders allocate the finite resources to serve the best interests of one student or the best interests of all students (Frick et al., 2013)? In the cases in which

students, teachers, and leaders have competing interests, DDDM appears to fail to provide clear, practical guidance for school leaders regarding which option should take precedence in decision making. Many of these decisions that influence both decision makers (e.g., school leaders) and others (e.g., students, teachers, parents, and communities) are considered as moral decisions.

Moral Decision Making

School leadership, by its nature, is a moral activity (Greenfield Jr., 2004). Morality is about what is the “right” and “wrong” way to behave (Ellemers et al., 2019). In essence, morality is a set of psychological adaptations (e.g., altruism and a willingness to pay a personal cost to benefit others) that “allow otherwise selfish individuals to reap the benefits of social cooperation” (Greene, 2013, p. 23). Morality thus functions to maintain a social order characterized by empathy, fairness, altruism, and cooperation (Tomasello & Vaish, 2013). For school leaders, to make moral decisions is to promote cooperation and collaboration in schools and communities by espousing five ethical principles:

- (1) the ethic of justice (e.g., moral principles of fairness, equality, equity, individual rights, due process, and responsibility for the common good),
- (2) the ethic of care (e.g., empathy, compassion, and treating people as ends but not means),
- (3) the ethic of critique (e.g., moral concerns over institutionalized injustice that disproportionately benefit some groups over others as a result of political, economic, and judicial power shaped by history),
- (4) the ethic of community (e.g., taking into consideration the values, beliefs, history, and desire of the community), and
- (5) the ethic of profession (e.g., professional practices and standards; Furman, 2004; Starratt, 1991; Shapiro & Stefkovich, 2011; Stefkovich & O’Brien, 2004).

To achieve this, school leaders can draw on a rich body of literature on morality, including the literature on moral reasoning (Paxton, Ungar, & Greene, 2012), moral identity (i.e., how individuals define themselves relative to various moral attributes such as benevolence and integrity; Hannah, Thompson, & Herbst, 2018), and moral licensing (i.e., the effect that when people initially behave in a moral way, they are later more likely to display behaviors that are immoral, unethical, or otherwise problematic; Blanken, van de Ven, & Zeelenberg, 2015). In the literature on moral philosophy, there are two prominent schools of thought in moral decision making: utilitarianism and deontology.

First, utilitarianism comes from the word “utility,” which means “desirable consequences and outcomes.” utilitarians choose the option that maximizes the greater good (Singer, 1979). Utilitarians focus on the utility—the outcome, and the end justifies the means if the outcome is

maximized for the group. When presented with options of killing one person to save five people or killing five people, utilitarians would choose the cold-hearted, callous, but a seemingly rational option of sacrificing one person to save five people (Greene, Sommerville, Nystrom, Darley, & Cohen, 2001). In the Atlanta Public Schools cheating scandal, some school principals took a utilitarian approach to make their decision of changing student answers in state standardized tests, because the outcomes would be boosting (fabricating, to be precise) test scores, improving school ratings in the state accountability system, and potentially keeping the school open to serve more students in the community (Aviv, 2014). Therefore, the end justifies the means. The utilitarian principle is the underpinning of the centerpiece of classic economic theories of decision making: the theory of utility maximization (Smith, 1776/1981)—the selected option generates the maximum outcomes for the group and promotes the greater good. The current school accountability system encourages school leaders to use the utilitarian principle in their decision making—moral decision making included—because school leaders are held accountable for school performance (the maximized greater good for schools). Under the pressure of accountability, data—particularly the quantifiable, seemingly rational and objective data—serve as an appealing means to justify leaders’ decision. Therefore, the principle of utilitarianism is quite compatible with DDDM in moral decision making.

In comparison to utilitarians, deontologists believe in the unconditional imperative of right (e.g., respects of rights of individuals) and wrong (e.g., harming others; Kant, 1993/1785). Deontologists would refuse to smother a crying baby to save a group of people hiding from enemy soldiers, because harming the baby is categorically wrong, regardless of the group interest (Haidt, 2012). In the Atlanta Public Schools cheating scandal, some teachers refused to change the students’ answers in tests, because they believed cheating was categorically wrong. For deontologists, making moral decisions concerns what is the right—“fair or just” (Strike, Haller, & Soltis, 2005, p. 3)—thing to do, not necessarily choosing the option that maximizes the group interest.

When do people use the utilitarian principle to make moral decisions? When do people make decisions as deontologists? Some scholars argue that people make moral decisions through a dual process model (Greene, Morelli, Lowenberg, Nystrom, & Cohen, 2008; Greene, Nystrom, Engell, Darley, & Cohen, 2004; Greene et al., 2001). The first process is driven by humans’ automatic emotional responses to make deontological judgments of categorically right and wrong. People’s beliefs and values serve as their moral compass—the automatic moral intuitions generated from rapid emotional arousal (Haidt, 2012)—in their moral decision making. When an option runs contrary to a decision makers’ beliefs and values about what is right and wrong, the decision maker

automatically responds with aroused emotions such as disgust and anger (Nelissen & Zeelenberg, 2009; Wicker, Keysers, Plailly, Royet, Gallese, & Rizzolatti, 2003). In addition to the emotion-laden process of moral decision making, another process is driven by cognitive capacity to make utilitarian decisions. Over this process, decision makers employ their cognitive capacity to engage in moral reasoning and cost-benefit analysis to explore the options, weigh the pros and cons of different options, rank the options based on data and evidence, and select the option that generates the maximum benefits for the group.

More important, the two processes in the dual process model of moral decision making do not carry equal weight. The emotion-laden process is activated faster than the cognitive-driven process, thereby wielding more compelling power in moral decision making (Greene, 2013). An elephant-rider analogy has been used to illustrate the dual process model: the emotion-laden process is the elephant; the cognitive-driven process is the rider (Haidt, 2012). The rider's (our conscious reasoning) job is to serve the elephant (automatic emotional responses): the rider sometimes reins in emotions when they run wild, such as assuaging our anger and suppressing the desire of revenge; the rider other times serves the elephant by providing post hoc rationalization. For instance, in the Atlanta Public Schools cheating scandal, some school leaders rationalized their decision of cheating in tests by believing they were doing it to keep the school open and for the greater good of the community (Aviv, 2014). To put the matter succinctly, moral decision making entails both emotional arousal and cognitive capacity. It is the interplay between emotions and moral reasoning that generate the best moral decisions (Moll et al., 2005). Being emotional in moral decision making does not necessarily mean being irrational. Rather, being emotional sometimes means "following our heart" and "doing the right thing."

Clash Between DDDM and Moral Decision Making in the Accountability Era

The tension between DDDM and moral decision making is discussed through two aspects: (1) the brain mechanisms imposing constraints for school leaders to make data-driven decisions and moral decisions simultaneously; and (2) the role of emotions in the tension between DDDM and moral decision making. Here I present the evidence explaining why DDDM and moral decision making might be sometimes on a collision course.

The Trade-off Between Default Mode Network and Task Positive Network

What is going on in our brain when a decision is being made? In human brains, the default mode network (DMN) and task positive network (TPN) are two brain networks (i.e., a set of multiple brain regions) that are antagonistic to each other (Boyatzis, Rochford, & Jack, 2014). The DMN and TPN work like the "two ends of a seesaw"

(Lieberman, 2013, p. 27): when the DMN is activated, the TPN is suppressed, and vice versa. The DMN is activated when we perform tasks intersecting emotion processing and social interactions (Buckner, Andrews-Hanna, & Schacter, 2008; Pascual, Rodrigues, & Gallardo-Pujol, 2013). Making moral decisions involves emotions (e.g., empathy, compassion, gratitude, pride, disgust, guilt, shame, regret, and moral outrage) in order to promote and stabilize cooperative behaviors dependent upon socially shaped ideas of right and wrong (Greene, 2013; Moll et al., 2005). The emotional and social aspects of moral decision making explain why making moral decisions activates the decision makers' DMN in their brains (Waldman, Wang, Hannah, & Balthazard, 2017). By contrast, the TPN is activated when we perform the tasks that demand logical reasoning, causal reasoning, and dehumanizing (Jack, Dawson, & Norr, 2013). As we fixate our attention on achieving a goal, we tend to be deliberate, analytical, and conduct a cost-benefit analysis which includes underestimating the cost of using deception (i.e., intentional misrepresentations of information) as a means to an end (Schweitzer, Ordonez, & Douma, 2004). Given the antagonistic relationship between the DMN and TPN, the DMN-TPN trade-off suggests a neural constraint for school leaders who cannot be "both genuinely empathetic and analytic at the same time" (Boyatzis et al., 2014, p. 6). This neural constraint has substantive implications for school leaders' decision making: the TPN—activated by DDDM which is an analytically intensive undertaking—might suppress the DMN which is needed for leaders to make the decisions to care for others. An overemphasis on leaders being analytical and data-driven, which activates the TPN and suppresses the DMN, may lead to the leaders' lack of empathic and moral concerns for others; whereas an overemphasis on leaders focusing on emotions, caring, being people-centered, which activates the DMN and suppresses the TPN, may lead to the loss of focus on accomplishing clearly defined goals. In this manner, DDDM and moral decision making might be incompatible at the same time.

The antagonistic aspects of leadership are also congruent with leadership literature which asserts that "the demands of both the organization and the profession [school leadership] interfere with enactment of caring" (Marshall, Patterson, Rogers, & Steele, 1996, p. 271). People's innate sense of caring, kindness, cooperation, and fairness are part of intuition (Gazzaniga, 2011; Gladwell, 2006). Intuition is a better guide than deliberation to make moral decisions when conflicts of interest are involved (Fehr & Gächter, 2002), as the deliberative analysis, activated by solving math problems, increases deception to maximize decision makers' individual interest and reduces altruistic behaviors such as donating to a charity (Zhong, 2011). These results are consistent with the ones from another experiment that tested the effect of decision time when decision makers' self-interest and their group's collective interest were pitted against each other. The faster people

decided, the more likely they put collective interest above individual interest (Rand, Greene, & Nowak, 2012). Further, an experimental study reported that being calculative, and deliberate led the participants to be more selfish in decision making than those completing non-calculative tasks (Wang, Zhong, & Murnighan, 2014). When we are being DDDM, we might make decisions that go against ethical principles.

The Overlapped Neural Mechanisms Between Empathy and Moral Decision Making

In addition to the neural constraint imposed by the DMN-TPN trade-off, another brain mechanism germane to moral decision making lies with the overlapped neural mechanisms between the emotion of empathy and making moral decisions. Empathy has three components: (1) emotional sharing (i.e., sharing or becoming affectively aroused by others' emotions), (2) perspective taking (i.e., taking others' perspective by putting ourselves in others' shoes), and (3) empathic concern (i.e., the urge of caring for others' well-being and alleviating their distress; Decety & Cowell, 2014; Singer et al., 2006; Zaki & Ochsner, 2012). Empathizing with others motivates us to care for others (Mastena, Morellib, & Eisenbergerb, 2011), to be altruistic (Mathur, Harada, Lipke, & Chiao, 2010), and to make less utilitarian decisions which maximize the greater good (Greene et al., 2001). As a result, empathy is considered as the foundation of moral decision making (Decety & Cowell, 2014), and "the bedrock of prosocial morality and the glue of society" (Hoffman, 2008, p. 449).

More important, our brains have similar brain activity in some brain regions when we empathize with others and when we make moral decisions (Moll, Zahn, de Oliveira-Souza, Krueger, & Grafman, 2005). The ventromedial prefrontal cortex (part of the DMN network), in particular, is the brain region associated with both emotion processing and moral decision making. People with brain damage in this region make cold-hearted, emotionally-detached, highly utilitarian decisions, such as being willing to sacrifice one family member to save five strangers (Thomas, Croft, & Tranel, 2011). The overlapped neural mechanisms between empathy and moral decision making thus explain why empathy has been considered as the foundation of moral decision making (Decety & Cowell, 2014). Therefore, to make moral decisions, school leaders need to empathize with others, which activates the DMN, rather than solely focusing on data and being emotionally detached.

Of particular note is that the role of empathy in moral decision making is contingent on social identity. Social identity refers to the socially constructed identity based on gender, ethnic, religious, socioeconomic, political affiliation, sexual orientation, and other social categorizations (Lamm & Majdandžić, 2014; Roccas & Brewer, 2002). When there is a shared social identity between a decision maker and the group who is affected

by the decision, empathy—the feeling with others—is instrumental in making moral decisions that promote cooperation within the group. Without a shared social identity, empathy sometimes drives aggression, malice, and dehumanization towards outgroups, because human brains have reduced neural responses to the pain being inflicted on ethnic outgroup members (Bloom, 2016; Hein, Silani, Preuschoff, Batson, & Singer, 2010; Xu, Zuo, Wang, & Han, 2009). As a result, intense, overwhelming emotional responses sometimes distort our moral decisions as well, depending on whether the decision maker and the group have a shared social identity.

The above compelling evidence suggests that DDDM and moral decision making are sometimes in conflict. First, our brain imposes a neural constraint in decision making. The DMN-TPN trade-off explains why school leaders cannot be analytical, data-driven and empathic, caring for others simultaneously. Second, the emotion of empathy is essential in making moral decisions. DDDM tacitly leaves out emotions experienced by school leaders, assuming either emotions are irrelevant or emotions work against optimal decision making. In fact, in addition to empathy, other emotions (e.g., compassion, gratitude, pride, disgust, guilt, shame, regret, and moral outrage) are important in moral decision making, as attested by Adam Smith's (1759/1976) seminal book *The Theory of Moral Sentiments*. Conversely, the emotion-detached, seemingly objective DDDM sometimes can be counterproductive to motivate teachers, because emotions—as an integral component in moral decision making—function as a strong motivating force (Wang, forthcoming). As a result, under the increasing pressure of school accountability system, it is particularly important for school leaders to contemplate how to build a compassionate, caring, people-centered school culture, instead of dehumanizing people by reducing them to data points over the leaders' decision-making process.

Recommendations for School Leaders' Decision Making

School leaders make countless decisions every day. Their decisions are then executed through their behavior. It is impractical, if not possible, for leaders to make every decision by completing the six-step DDDM process (e.g., collecting, organizing, analyzing, summarizing, synthesizing, and prioritizing; Mandinach et al., 2006). DDDM is full of good intentions, but it is not an unalloyed good. This article casts a critical view on DDDM by drawing attention to the potential tension between DDDM and moral decision making. Worthy of note is that the current article does not argue against using data to inform decision making. Rather, the article calls attention to the over-obsession with quantifiable information and the exclusion of emotions in leaders' decision making. DDDM does have its merits. Data are like signposts. Without high-quality data, school leaders as decision makers are flying blind. However, education is inherently

people-centered. Not everything about people can be reduced to data. The single-minded pursuit of being DDDM, as Campbell's law stated, could pressure people to game the system and distort the social processes that the data intend to measure (Campbell, 1979; Muller, 2018). Here I urge caution over an exclusive focus on DDDM in school leadership. We have to stop assuming that data, notably high-quality data, are always available at the moment of decision making. Further, school leaders often have to make decisions based on incomplete data, uncertainty, ambiguity, conflicting perspectives from stakeholders, and under time pressure in ever-changing contexts. In fact, many decisions involve degrees of ambiguity and uncertainty that DDDM is ill-equipped to handle. Therefore, when it comes to making wise decisions, data are not enough. The over-obsessive pursuit of DDDM is problematic, and sometimes even emboldens unethical behaviors to maximize the outcomes. Based on the literature on decision making presented above, I conclude this article with two recommendations for school leaders' decision making: (1) being aware of the limits of DDDM, and (2) checking emotions when making decisions.

Being Aware of the Limits of DDDM

The first recommendation is for school leaders to be aware of the limits of DDDM. Given the neural constraint imposed by the DMN-TPN tradeoff, an enriched understanding of the limits of DDDM is particularly important in the leadership practices aiming to build socially just and culturally responsive schools and communities (Wang, 2019a). To make moral decisions, it is insufficient for school leaders to solely rely on data or exclusively consider their own beliefs, values, virtues, practices, and principles. If we consider that "the school, like all formal organizations, is basically a decision-making structure" (Hoy & Miskel, 2013, p. 331), leaders' decision making is then situated in the organizational contexts in which people might have competing interests. When school leaders are at the crossroads where people have competing interests, making moral decisions is about drawing upon the "interlocking sets of values, virtues, practices, and principles that work together to suppress or regulate selfishness and make cooperative social life possible" (Decety & Cowell, 2015, p. 526). When moral decision making is at odds with DDDM, Strike et al. (2005) posed a crucial question for decision makers: "When is it permissible to violate a person's rights in order to produce a better outcome?" (p. 19) One simple answer might be: Be a human first, a leader second. If we fixate on data but forget the human part, then it runs counter to the inherently social nature of leadership (Wang, forthcoming).

Checking Emotions When Making Decisions

Emotions have been considered as one of the under-examined factors in school leaders' decision making (Johnson & Kruse, 2010). Implicit in DDDM is the

dichotomy between emotions and decision: emotions and optimal judgment do not go together. Emotions have been discounted as irrational, illogical, personal, subjective, and "a disrupting force in decision making" (Gazzaniga, Ivry, & Mangun, 2013, p. 447). This school of thought can be dated back to Plato, who postulated the emotion-reason dichotomy by an analogy: emotions are wild horses that have to be reined by thinking and reasoning. This school of thought is also attested by the old saying, "Don't allow emotions to cloud your judgment." Yet empathy is essential in moral decision making (Hoffman, 2008). Damasio (1994) also argued that emotional information, in the form of physiological arousal, is needed to guide decision making. In fact, emotions are potent, pervasive, predictable, sometimes harmful and sometimes beneficial drivers of decision making (Lerner, Li, Valdesolo, & Kassam, 2015; Wang, forthcoming).

Being dispassionate in decision making should not be taken as the hallmark of an effective leader. Through an emotion lens, decisions could look cold-blooded, calculating, and callous without emotions. School leaders need emotions to make decisions, especially the emotions elicited in making moral decisions. If moral decisions are the ones that promote cooperation within the group, then moral emotions (e.g., empathy, compassion, anger, disgust, shame, and guilt) binds decision makers to be cooperative within their group. Needless to say, it is an intensely emotional experience to apply the principles of the ethics of justice, care, critique, community, and profession in leaders' moral decision making. Following the ethic of justice evokes the emotion of anger. For instance, when we are treated unfairly, anger prompts us to reject unfairness (Sanfey, Rilling, Aronson, Nystrom, & Cohen, 2003). When we see others being treated unfairly (e.g., being deprived of their rights or getting less than they deserve), our natural preference for justice is violated, triggering moral outrage which motivates us to right the wrong, object to people and policies that engender injustices, and altruistically punish wrongdoers who violate moral norms, even when the punishment incurs the costs on the punisher's end (Hoffman, 2008). Following the ethic of care evokes compassion and empathy (Crawford, 2017). It takes compassion for school leaders to respond to the fear of undocumented students who have the right to access a free, public K-12 education (*Plyler v. Doe*, 1982) while complying with immigration authorities. Following the ethic of critique evokes guilt. For instance, teachers who taught in urban school districts felt guilty, which propelled them to advocate for their students (Mawhinney & Rinke, 2017). We often make important decisions for emotional reasons. Emotions are an integral element over the process of seeking, evaluating options, as well as choosing a course of action (Pfister & Böhm, 2008). Both emotions and cognition guide our decision making and the resultant behavior; thus, emotions should not be simply dismissed as a disrupting force that clouds our decision making (Gazzaniga et al., 2013).

Data alone do not necessarily lead to wise decisions. Despite the neural constraint that school leaders cannot be compassionate and analytical simultaneously, leaders can work in alternation between making data-driven decisions and moral decisions. Sometimes school leaders follow their heart, which reflects their instincts, gut feelings, and emotions. However, when leaders allow their emotions to go unchecked without being analytical and deliberate, they may become too impulsive, too risk-averse or risk-seeking in decision making. Yet this by no means suggests that emotions should be entirely suppressed to promote sound decisions, because emotions provide salient inputs in the decision-making process (Pfister & Böhm, 2008). Being too data-driven, leaders may become cold-blooded, calculating utility maximizers without compassion for others, thereby having a deleterious effect on motivating others. Still, there are times when leaders must use data, engage in analytical thinking without strong emotions taking over. The real question is how to strike a balance. This entails school leaders to be aware of their own emotions, regulate emotions, express emotions appropriately, and recognize others' emotions.

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