VALUES-BASED LEADER BEHAVIORS AND INFLUENCE: A CONCEPTUAL REFRESH AND EXPERIMENT

by

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ABSTRACT

GEORGE STOCK. Values-based Leader Behaviors and Influence: A Conceptual Refresh and
Experiment
(Under the direction of DR. GEORGE C. BANKS)

Values-based leader behavior is commonly referenced by scholars and practitioners as an effective style of leadership. Problematically, multiple definitions of the concept exist that are either ambiguous, tautological, or valanced. Additionally, the concept has been researched almost entirely via questionnaires with little triangulated evidence. The current study reviews previous conceptualizations of values-based leader behavior as well as the key components of leadership, values, and behavior to arrive at a new conceptualization framed from a signaling theory perspective: goal-oriented action or inaction signaling an individual's, organization's, or society's value structure. Then, I review three commonly referenced manifestations of valuesbased leader behaviors (charismatic leader tactics, ethical leader signals, and transformational leader behaviors) and make the case that pay-for-performance strategies too can signal one's value structure. Using a pre-registered experimental design, I explore the extent to which each of these values-based leader behaviors influence stakeholder in- and extra-role behavior compared to a control condition in a realistic text labeling task. Results found that pay-for-performance strategies influenced workers such that their in-role performance was significantly greater than the control condition, and ethical leader signals influenced workers such that they were significantly more likely to participate in an unpaid extra-role task. I conclude with a discussion of the theoretical and practical implications as well as future research directions.

DEDICATION

To Liana, for your support, encouragement, partnership, and love throughout this Ph.D. journey and the rest of life. To my family, friends, mentors, and random acquaintances who have inspired and encouraged me.

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LIST OF ABBREVIATIONS

CLTs Charismatic Leader Tactics

ELSs Ethical Leader Signals

PFPs Pay-for-Performance Strategies

TLBs Transformational Leader Behaviors

CHAPTER 1: INTRODUCTION

Scholars and practitioners alike have suggested that values help leaders influence stakeholders to engage in behavior that is above and beyond expectations (e.g., Bass, 1985; Majer, 2004; MasterClass, 2022; Sinek, 2017). Appealing to others' values may be a particularly influential leader tactic as values are broad and desirable goals that motivate action and serve as guiding principles in our life (Sagiv & Schwartz, 2022). Problematically, however, research on values-based leadership often suffers from two issues that preclude causally determining the extent to which such leader behaviors influence performance above and beyond expectations.

First, missing from the literature is a definition that identifies precisely what values-based leader behavior is and what it is not. Although this popular concept is often mentioned during reviews of leader behaviors (e.g., Banks et al., 2018; Bass, 1985; Fischer & Sitkin, 2023), rarely is a definition provided (for an example of a provided conceptualization, see House, 1996). Moreover, when a definition is provided, it typically falls into one of three conceptualizations that are related yet also meaningfully different. As with any time there are multiple definitions for a concept, two people mentioning values-based leadership in separate conversations may not be referring to the same concept. The use of inconsistent and inadequate definitions severely limit our ability to rigorously explore the concept and accumulate knowledge that can inform theory and practice.

Second, research on values-based leadership typically involves self- and other-report questionnaires to capture leaders' and stakeholders' values and behavior (e.g., Brown & Trevino, 2009; Sosik, 2005). Scholars from both the leadership and values literature reference how social desirability, demand effects, and neutral or extreme response biases that can impact such data (e.g., Banks et al., 2021b; Dobewall et al., 2014; Fischer, 2023; Fischer & Sitkin, 2023).

Consequently, the findings regarding effect sizes and causality may be misleading or even inaccurate (Antonakis et al., 2010)

Avoiding these limitations can be achieved through alternative conceptual and methodological approaches. Conceptually, a review of previous definitions of values-based leadership as well as the focal topics of leadership, values, and leader behaviors is needed. From this review, we can deduce the necessary and sufficient conditions of values-based leader behaviors to determine what it is and what it is not (Podsakoff et al., 2016). Methodologically, the predominantly questionnaire-based designs need triangulated evidence from approaches such as mixed methods studies and experiments designs. Experiments are a particularly advantageous technique given their ability to clearly establish temporal precedence, reliably measure the relationship between *x* and *y* (the relationship being beyond chance), and rule out alternative explanations (Antonakis et al., 2010; Campbell & Stanley, 1963).

The primary goal of the current study is to investigate the extent to which values-based leader behaviors influence stakeholders to perform above and beyond expectations. To accomplish this, I first review values-based leadership by evaluating previous conceptualizations as well as outline the relevant components of leadership (Yammarino, 2013), Schwartz's theory of human values (Schwartz et al., 2012), and behavior (Banks et al., 2021b; Levitis et al., 2009). Resulting from this review, I present a new conceptualization of values-based leader behavior that we can more rigorously explore. Additionally, I identify modern leader behavior concepts (charismatic, ethical, and transformational leader behaviors) that contain the expression of values in their respective definitions as well as make the case that pay-for-performance strategies can also involve the expression of values.

Second, I review stakeholder in- and extra-role behavior and expand on how these concepts can be positioned as indicators of influence. Third, I conducted a randomized, between-subjects virtual experiment (n = 540) that exposes a worker to one of five leader behavior conditions: (1) standard leader behavior (i.e., the active control group), (2) pay-for-performance strategies, (3) charismatic leader behavior, (4) ethical leader behavior, and (5) transformational leader behavior, and then ask workers to complete a realistic text labeling task. For evidence of the extent to which values-based leader behaviors influence stakeholder performance and performance beyond expectations, I measure workers' output in a data science labeling task during the in-role task (performance), their decision to participate (or not) in the extra-role task (performance beyond expectations), and worker output in an extra-role task (performance beyond expectations). I conclude by discussing the implications of this study as well as limitations and future directions.

CHAPTER 2: LITERATURE REVIEW

2.1 Values-Based Leadership

Values-based leadership is typically mentioned or conceptualized in one of three ways. The first way is as a meta-level concept referenced when discussing an individual leader behavior concept. For instance, when discussing the implications of their study on charismatic leader tactics in a virtual environment, Ernst and colleagues (2022) mentioned the potential implications their study had for *other* values-based leadership styles. A second common conceptualization is as messages that appeal or resonate with stakeholders' values (e.g., Brown & Trevino, 2009). These messages have been thought to be delivered primarily through charismatic-transformational behaviors (House, 1996). A third common conceptualization, presented either implicitly or explicitly, is as morally principled behavior (i.e., doing the right thing for others; Reilly & Ehlinger, 2007). Although these conceptualizations productively identify key attributes, the range covered across each conceptualization also suggests a lack of collective precision regarding our understanding of values-based leadership.

The first common conceptualization of characterizing values-based leadership as a metalevel concept proves advantageous by allowing for the expression of a spectrum of values through diverse behaviors. However, this conceptualization is also inherently ambiguous, precluding the identification of clear conceptual boundaries. Without clear conceptual boundaries, it is impossible for scholars and practitioners to know precisely when such behavior is being enacted. Consequently, a new definition should include clear conditions to identify such behavior.

The second common conceptualization, value messages that appeal to stakeholders' values, is beneficial as it implies an interactive communication process between the message

sender and receiver. However, this conceptualization is also problematic due to its tautological framing that encompasses an effect (whether a stakeholder finds the value message appealing) within its definition. This poses a fundamental limitation to any research that leverages this definition because identifying values-based leader behaviors then becomes retrospective which reduces the ability to rule out alternative explanations. Future research should leverage a conceptualization that is not tautological so that we can better understand the concept as well as the process through which value messages are communicated.

The third common conceptualization, morally principled action (i.e., doing the right thing for others), effectively highlights certain values that can be expressed (e.g., pro-social values). However, the inclusion of only other-oriented values, and the exclusion of self-enhancement values, omits half of the human values that can be expressed and is a clear example of a valance-based leadership style (Fischer & Sitkin, 2023). Valanced-based leadership styles are patterns of behavior that are labeled as either good or bad rather than capturing the realistic nuances of leader behavior. Fischer and Sitkin found this to be a common issue that increases the risk of construct redundancy, behavioral amalgamation, and causal indeterminacy (for a full review, see Fischer & Siktin, 2023). Consequently, an adequate definition of values-based leader behaviors should either include the full range of human values or provide justification for only including other-oriented values.

Although each common conceptualization of values-based leadership contains a degree of insight, they fall short of creating clear boundaries that help define what it is and distinguish it from what it is not. To gain more clarity, I will review and integrate additional insights from research on leadership, human values, and behaviors.

2.1.1 Leadership. Leadership is among the most widely discussed and researched areas in the organizational sciences due to its significant practical and theoretical implications (Ernst et al., 2022; Schyns & Schilling, 2013; Yukl et al., 2019). In his review of the past, present, and the future of leadership, Yammarino (2013) identified three essential elements to any conceptualization of leadership. First, leadership is a multilevel concept, and any definition of it must account for this. Second, leader and stakeholder interactions should be framed as process based. That is, current interactions can be thought of as being shaped by the past and simultaneously shaping future interactions. Third, it is critical that leaders and stakeholders work together and that they desire to accomplish goals together. Central to this third point is the concept of influence. Influence implies that the behaviors enacted by the leader can or have caused change(s) in the expected aspect of a social system (Mumford & Barrett, 2012).

Thus, leadership at its core is a social and goal-oriented influence process comprised of inputs (e.g., leader behaviors) and outputs (e.g., follower behaviors, organizational effectiveness; Fischer et al., 2017; Yukl, 2012). Importantly, this conceptualization incorporates Yammarino's conditions and remains broad enough to include the many potential attributes of leadership (e.g., empowering, directive, corrective). Additionally, it frames leadership as an influence process which avoids defining the concept by an outcome (e.g., leadership is having followers).

There are numerous tactics (i.e., inputs) that leaders can use to influence stakeholders such as power-derived tactics (e.g., manipulation, expertise), relational-derived tactics (e.g., social identification, external attribution), and values-derived tactics (e.g., values-based behavior; Barbuto, 2000). Values-based tactics are particularly interesting because they can induce action toward the completion of a goal, potentially aligning multiple stakeholders to contribute to

something that they are not required to do but may benefit from in the long run such as a public good.

2.1.2 Values. Values capture convictions about desirable end states or behaviors that transcend specific situations, inform one's evaluation of behavior and events, and are organized by relative importance (Schwartz & Bilsky, 1987). Once ordered, one's value structure determines what is and what is not socially desirable and personally rewarding (Locke, 1991), which then motivates action (McClelland, 1985). Recent organizational science research on values has relied on Schwartz's values theory (2012). Although other approaches to the study of values exist (e.g., De Raad et al., 2016; Gouveia et al., 2014), I adopt Schwartz's theory of values as it is the most widely used throughout social and cross-cultural psychology and has the most empirical support with a diverse demographic sampling (Maio, 2010).

There are seven primary components of values that help define what they are as well as what they are not (e.g., attitudes, needs, goals, motives, and traits; Sagiv & Schwartz, 2022). First, people form a hierarchy of their values, ordering them in terms of relative importance. The more important a value is to someone, the more likely it will guide their behavior (Rokeach, 1973). Second, individuals consider their value structure to be inherently desirable, worthy, and good (Roccas et al., 2014; Rokeach, 1973). Third, because of their social desirability, values can be used to gain cooperation from others in the pursuit of goals by communicating values inherent to the goal pursuit (Schwartz, 1992). Fourth, values are broad goals that traverse contexts. Fifth, values are mostly stable over time, both in their relative importance (i.e., rank-order difference) and their absolute importance (i.e., mean-level difference) (e.g., Milfont et al., 2016; Vecchione et al., 2016). Sixth, values can easily be brought to mind, reflected upon, and consciously chosen to be pursued or ignored at any time (Rokeach, 1973). Seventh, values can be used to make sense

of life by using them to justify, judge, and evaluate one's own and others' behavior (Rokeach, 1973; Schwartz, 1992).

Schwartz and colleagues identified ten basic values and nineteen further refined values that make up an individual's value structure (Schwartz, 2017; Schwartz et al., 2012). Table 1 provides a description of these ten basic values as well as the refined values. Schwartz and colleagues also found evidence that the values fit into a circular framework with two axes (2012; see Figure 1). The first axis contains the value's orientation toward self-enhancement or self-transcendence, which refers to whether the value aligns more so to individual or collective interests. An individual orientation emphasizes achievement, power, and success, whereas a collective orientation emphasizes altruism and universalism. The second axis contains the value's orientation toward openness to change or conservation which captures the extent to which one values experimentation, flexibility, and change, compared to seeking conformity, upholding tradition, and meeting obligations. The framework is circular such that values with greater compatibility are positioned closer to one another.

Table 1: Four Higher Order Values, 10 Basic Values, and 19 More Narrowly Defined Values in the Refined Theory of Values

Higher Order	10 Original Values	Common Labels	19 More Narrowly Defined
Self-	Benevolence: Preservation and	Honest, loyal,	Benevolence-Dependability: Being
transcendence	enhancement of the welfare of	helpful, forgiving,	a reliable and trustworthy member of
	people with whom one is in	responsible	the in-group
	frequent personal contact		Benevolence-Caring: Devotion to
			the welfare of in-group members
	Universalism: Understanding,	Broadminded,	Universalism-Tolerance:
	appreciation, tolerance, and	wisdom, a world of	Acceptance and understanding of
	protection for the welfare of all	beauty, equality,	those who are different from oneself
	people and of nature	unity with nature, a	Universalism-Concern:
		world at peace,	Commitment to equality, justice, and
		social justice,	projection for all people
		protecting the	Universalism-Nature: Preservation
		environment	of the natural environment
			Humility: Recognizing one's
			insignificance in the larger scheme of
			things
Conservation	Conformity : The restraint of	Self-discipline,	Conformity-Interpersonal:
	actions, inclinations, and	obedient, politeness	Avoidance of upsetting or harming
	impulses that are likely to	honoring of parents and elders	other people
	upset or harm others and	and elders	Conformity-Rules: Compliance with
	violate social expectations or		rules, laws, and formal obligations
	norms	Respect for tradition,	Tradition: Maintaining and
	Tradition: Respect,	humble, accepting	preserving cultural, family, or
	commitment, and acceptance	my portion in life,	religious traditions
	of the customs and ideas that	devout moderate	rengious traditions
	traditional culture or religion provides	de vout moderate	
	Security: Safety, harmony,	Family security,	Security-Societal: Safety and
	and stability of society,	national security,	stability in the wider society
	relationships, and self	reciprocation of	Security-Personal: Safety in one's
	relationships, and sen	favors, social order,	immediate environment
		clean	Face: Security and power through
			maintaining one's public image and
			avoiding humiliation
Self-	Power: Control or dominance	Social power,	Power-Resources: Power through
enhancement	over people and resources	wealth, authority,	control of material and social
		preserving my public	resources
		image	Power-Dominance : Power through
			exercising control over people
	Achievement: Personal	Successful,	Achievement: Definition unchanged
	success through demonstrating	ambitious, capable,	
	competence according to social	influential	
	standards	Discourse	Haladan D.C. W.
	Hedonism: Pleasure and	Pleasure, enjoying	Hedonism : Definition unchanged
	sensuous gratification for	life	
	oneself		

Openness to	Stimulation: Excitement,	A varied life, daring,	Stimulation: Definition unchanged
Change	novelty, and challenge in life	an exciting life	Self-Direction-Action : The freedom
	Self-Direction: Independent	Creativity, freedom,	to determine one's own actions
	thought and action, choosing,	independent,	Self-Direction-Thought: The
	creating, and exploring	curious, choosing	freedom to cultivate one's own ideas
		own goals	and abilities

Source: Adapted from Schwartz & Cieciuch (2022) and Maio et al. (2009)



Figure 1: Circular motivational continuum of 19 values in the refined value theory.

Note: Figure adapted from Schwartz & Cieciuch (2022).

2.1.3 Behaviors. Behaviors are "the internally coordinated responses (actions or inactions) of whole living organisms (individuals or groups) to internal and/or external stimuli, excluding responses more easily understood as developmental changes" (Levitis et al., 2009, pg. 103). Signaling theory has increasingly become adopted across the organizational sciences as an explanatory mechanism for how behavior (e.g., leader behavior) can convey information about the signal sender to the receiver (Banks et al., 2021b; Connelly et al., 2011). Signaling theory is fundamentally concerned with information asymmetry, a condition wherein one party has more or better information than another (Bergh et al., 2019). As a result of the information asymmetry, the involved parties can then choose to either increase or decrease the level of asymmetry through signals. Signals are sent or received via verbal and non-verbal behaviors that are visible and in part designed to communicate (Spence, 2002).

In the case of leadership, signals have been positioned as an explanatory mechanism for how leader behaviors can influence stakeholders' behavior and evaluations of the leader (e.g., reduced counterproductive work behaviors, increased prosocial behavior; Antonakis et al., 2021; Banks et al., 2023; Ernst et al., 2022; Stock et al., 2023). From a stakeholders' perspective, signals serve as information that will inform whether they find the signal sender to be a competent leader, one who has stakeholders' best interest in mind, and one that can be trusted, among other factors (Bastardoz & Van Vugt, 2019).

For values-based leader behavior specifically, a leader may be signaling information about the leader's personal values, the values that guide the team, or the organization's values. For instance, if a leader were to close the office early so that the team could socialize outside of the office, this behavior could be the leader's direct expression of valuing benevolence (i.e., that which is good for the group) and hedonism (i.e., having fun, enjoying life). The same behavior,

however, may be an unusual expression for a particular leader (e.g., one who is extremely task-focused), so closing the office early for team bonding may better capture the organization's values and the leader's commitment to honoring the organization's values. This is to say, the behavioral expression of values is multi-level, with one's behavior potentially signaling personal values, the values of a team, or organization values.

2.1.4 Values-Based Leader Behaviors. Thus, by incorporating insights from previous conceptualizations of values-based leadership as well as key components of leadership, values, and behavior, values-based leader behavior is goal-oriented action or inaction signaling an individual's, organization's, or society's value structure.

This conceptualization includes several key attributes to help clarify precisely what is meant by values-based leader behaviors. First, it introduces the necessary attribute of goal-orientation which is a common attribute across both leadership and values. Second, drawing upon research on behavior, this conceptualization clarifies that values-based behavior can be expressed through action or inaction. For instance, the act of acknowledging an individual team member's accomplishment can express valuing individual achievement and simultaneously, according to Schwartz's circular values framework, the inaction of acknowledging the entire team's effort expresses valuing a team-oriented approach to a lesser degree. That is, all leader behavior can be viewed from a values perspective, with the key differentiators between these behaviors being the values that are signaled through the behavior (e.g., self-enhancement values compared to other-oriented values) as well as the extent to which the behavior saliently expresses the value.

Third, the inclusion of an individual, organizational, and societal perspective creates a multi-level framework through which these behaviors can signal information. Fourth, the

inclusion of value structures posits that all entities (e.g., individuals, teams, and organizations) have a value structure that influences their behavior and can be used when making judgements about others (e.g., whether a stakeholder will follower a leader signaling a particular value structure). Fifth, the value structure component also entails the full spectrum of values, distinguishing values-based leader behaviors from only being morally principled action.

With a proposed conceptualization of values-based leadership in hand, the next important piece is to identify how to adequately measure this concept. Previous research on value-based leadership typically involves questionnaires to gather data on leaders, stakeholders, values, and/or behaviors (e.g., Brown & Trevino, 2009; Sosik, 2005). Although questionnaires are not inherently problematic, when used to study leader behaviors and values they are prone to considerable amounts of error due to artifacts such as endogeneity bias (Antonakis, 2010), recall bias (Steiner & Rain, 1989), and social desirability (Nederhof, 1985), among other inconvenient truths (Fischer et al., 2020). Other-report questionnaires are particularly problematic as they position evaluations of behavior as a proxy for actual behavior. In doing so, introducing retrospective bias and one's positive (negative) affect at the time of the response (Fischer et al., 2020; Hansbrough et al., 2015) as well as the respondent's evaluation of the execution quality of the behavior (Fischer & Sitkin, 2023). Consequently, future values-based leadership research, although not needing to abandon questionnaires, should leverage other measurement devices and study designs.

Recent leadership research has leveraged behavioral taxonomies to measure and test the effects of leader behaviors (e.g., Antonakis et al., 2021; Ernst et al., 2022). Three existing leader behavior concepts that are particularly salient examples of values-based leader behavior include charismatic leader tactics (CLTs; Antonakis et al., 2016), ethical leader signals (ELSs; Banks et

al., 2021a; 2023), and transformational leader behaviors (TLBs; Stock et al., 2023). Importantly, each of these behavioral concepts necessarily includes the expression of at least one human value, and the behavioral taxonomies provide mechanisms to communicate these values saliently. I also make the argument that pay-for-performance behaviors (PFPs) are also value-based, because such incentivization structures can saliently communicate a leader or organization's goal(s) which can communicate the organization's value structure.

Although all leader behaviors can be viewed from a values perspective, leader behaviors differ in the extent to which they saliently express a value or set of values. For instance, standard (i.e., generic) leader behavior may broadly communicate to stakeholders the importance of doing the right thing. While such behavior broadly expresses information about the leader prioritizing prosocial values in their value structure, ELSs could accomplish this more saliently and potentially generate greater influence. That is, ELSs such as rewarding ethical behavior or correcting unethical behavior can more clearly signal the extent to which the leader prioritizes pro-social values on their value structure compared to statements that broadly state the importance of doing the right thing.

Next, I provide a brief review of CLTs, ELSs, TLBs, and PFPs to clarify how these behaviors signal information about a leader's value structure more saliently compared to standard leader behavior.

Charismatic leader tactics. Charismatic leadership has received considerable attention since House (1977) began its scientific exploration and Bass (1985) added to its popularity. After receiving numerous critiques (e.g., van Knippenberg & Sitkin, 2013), Antonakis and colleagues (2016) conducted a rigorous review of the topic, reconceptualizing charismatic leader tactics as "value-based, symbolic, and emotion-laden leader signaling" (Antonakis et al., 2016, p. 304).

Their reconceptualization also identified nine verbal charismatic leader tactics with associated definitions, presented in Table 2.

Table 2: Values-based leader behaviors

CLTs ELSs TLBs

Metaphor (or simile):

• Metaphor refers to a word or phrase used to describe an object or action that is different from its original meaning. A simile is a related comparison which often uses "like" or "as."

Stories / anecdotes:

• Generally, refers to particular places, events, characters. Has a plot and/or resolution. Do not need to be true.

Moral conviction:

• Personal statement of values or assessment of a situation that is value-laden. Often asserts right from wrong.

Sentiment of the collective:

• Statement of what one believes the followers are thinking, feeling, or aspiring to.

Setting high expectations:

• Explicit goal-setting for followers that is ambitious, often specific.

Create confidence that goals can be achieved:

• Statement that the speaker believes goals can be achieved.

Contrasts:

• Figure of speech in which one idea is opposed to another one.

Lists and repetition:

• Lists are composed of at least three parts and usually a maximum of five. Can be explicit (using numbers) or implicit. Repetition refers to a word or phrase repeated two or more times.

Rhetorical questions:

• Question that is asked to create an effect or make a statement, not to gather information

Expressions about altruistic action

• Makes statements about the importance of engaging in actions that promote the welfare of others as an outcome

Expressions regarding, upholding rules and norms

• Makes statements about rewards and the importance of collective ethical norms, rules, standards, or values

Expressions regarding fair decision making:

• Makes statements about the importance of unbiased consideration of the interests of different entities (e.g., employees, stakeholders) in decision making processes

Expressions regarding two-way communication:

- Openness Makes statements about an environment where all individuals feel like they can be open and share information
- Transparency Makes statements about communicating transparently and sharing what he/she can about situations that arise within an appropriate time frame

Expressions about corrective action:

• Makes statements about corrective actions for unethical processes or outcomes

Virtue signaling:

• Makes statements about his or her own moral character

Illustrative example:

• Discusses instances involving other parties to portray what the leader believes is right or wrong

Expressions regarding rewarding moral behavior:

• Discusses official recognition for ethical actions

Question critical assumptions:

• Makes statements with questions that examine the fundamental elements of an idea or argument

Words of affirmation:

• Makes statements with content regarding a follower's strengths

Seek different perspectives:

• Makes statements asking others to express their creative ideas to generate the best solution

Teaching life lessons:

 Makes statements with a lesson or principle applicable to one or more areas of life

Introduce follower to developmental opportunity:

 Makes statements encouraging others to step out of their comfort zone for the sake of growth and development

Present different perspectives:

 Makes statements that include ideas or arguments that display different perspectives on a matter

Given that CLTs include values-based leader signaling more broadly, these behaviors can involve the expression of the entire spectrum of human values which can communicate information about the sender's value structure. Charismatic signals have been found to engage with stakeholders in different ways. First, evidence suggests that leaders who enact CLTs receive more positive evaluations from stakeholders compared to leaders who enact standard leader behaviors (e.g., Antonakis et al., 2011; Hausefield, 2023). That is, stakeholders attend to these signals and use the information to form an impression of the leader. Second, evidence suggests that CLTs convey information that causes stakeholders to increase performance output (e.g., Antonakis et al., 2021; Ernst et al., 2022; Fest et al., 2021; Meslec et al., 2020; Nieken, 2022). Although numerous studies have found evidence for the impact that CLTs can have on in-role performance, less have explored the extent to which CLTs influence extra-role performance (e.g., Ernst et al., 2022). In their experiment, Ernst and colleagues found no statistically significant relationship between CLTs and extra-role behavior but did find a practically significant difference in that the CLT condition saw a 50% increase in the proportion of workers who stayed to complete a voluntary work task compared to a control condition.

Related studies in the values literature have found experimental evidence that communicating (i.e., priming) participants with different values can cause behavioral responses. For instance, priming participants with achievement and competition-based values caused them to better succeed at a word search task compared to being primed by neutral terms (Bargh et al., 2001). Such findings may translate and have meaningful implications for leaders who express values in their communication. Thus, evidence suggests CLTs could influence both performance and performance beyond expectations by communicating the full range of human values.

Ethical leader signals. The study of ethical leadership has seen a significant rise in popularity and relevance in the 21st century. This rise is likely the result of an increasing number of widely publicized scandals (Adler, 2002) as well as a growing belief that positive stakeholder outcomes are just as, if not more, important than shareholder outcomes (Freeman, 2019).

Recently, Banks and colleagues (2021a) addressed concerns over ethical leader behavior's conceptual ambiguity and relativity by reconceptualizing it as "signaling behavior by the leader (individual) targeted at stakeholders (e.g., an individual follower, group of followers, or clients) comprising the enactment of *prosocial values* combined with the expression of moral emotions" (pg. 6). Banks and colleagues (2023) then went on to identify eight verbal ethical leader signals (see Table 2).

ELSs serve as signals to others regarding the extent to which the leader holds self-transcendental values (e.g., universalism) and the emotions that motivated the leader to action (i.e., moral emotions). Evidence suggests that these behaviors cause stakeholders to evaluate the leader as more ethical, cause a reduction in financial theft, and an improvement in performance (Banks et al., 2023). Banks and colleagues tested but did not find a statistically significant relationship between ELSs and extra-role behavior; however, their experiment also seems to currently be the only published behavioral investigation of ethical leader behavior and true extra-role behavior.

Drawing upon studies in the values literature, evidence indicates that activating universalism values raises the likelihood of selecting an environmentally friendly television (Verplanken & Holland, 2002) and individuals who were primed with helpfulness demonstrated higher likelihood of providing assistance to an experimenter after a minor lab incident (Macrae & Johnston, 1998). That is, both studies found evidence that such values could increase the

likelihood of participants acting in a way that they were not required. Thus, evidence suggests that ELSs could influence both performance as well as performance beyond expectations.

Transformational leader behaviors. Transformational leadership, which has historically been conflated with charismatic leadership, has been cited as one of the most popularly studied leadership concepts (Banks et al., 2018; DeRue et al., 2011). Stock and colleagues (2023) recently reviewed and reconceptualized TLBs to address critiques of the concept (e.g., van Knippenburg & Sitkin, 2013), redefining it as "leader signaling through *developmental* and *prosocial behaviors* tailored for each unique stakeholder" (pg. 6). Their work also identified six verbal transformational leader behaviors (see Table 2).

TLBs can create social influence and reduce information asymmetries by communicating the leader's values and goals involving their desire to improve and enhance an individual, team, and/or organization. Leaders can express stimulation values that can communicate novel ideas regarding personal growth and challenges to help stakeholders with some aspect of development. For instance, leaders can hold private information such as a good understanding of a team member's strengths and blind spots (Vazire & Carlson, 2011), the best avenue for a team member to develop a specific skill set, and an understanding of meaningful goals and effective strategies for completing them.

TLBs can inform stakeholders of the extent to which the leader values developing others and contributing toward the good of the group (Bastardoz & Van Vugt, 2019; Brewer & Gardner, 1996). Resulting from this information, stakeholders may be influenced to engage in developmental activities, contribute more effort toward the good of the group, and more fully adopt values related to a development-orientation. Evidence suggests that leaders who enact TLBs can cause stakeholders to view the leader as more transformational as well as cause

stakeholders to contribute more financially to a public goods pot (rather than keeping money for personal gain) compared to leaders who enact standard leader behavior. Relatedly, priming participants with the value of stimulation can increase curious behavior (e.g., number of questions asked, Maio et al., 2009). Thus, evidence suggests TLBs could influence both performance and performance above and beyond expectations.

Pay-for-performance. Pay-for-performance is a form of transactional leader behavior which emphasizes providing rewards that are contingent upon the fulfillment of a contractual obligation (Podsakoff et al., 2006). Traditionally, and especially from an economics viewpoint, transactional and pay-for-performance leadership relationships are framed as absent of values (Zehnder et al., 2017). However, pay-for-performance behaviors may instead inform stakeholders of the sender's value structure. PFPs may serve as costly signals (financially costly) that carry information about what behavior(s) and output management and the business find most desirable.

Meta-analytic evidence suggests a relatively strong relationship between pay-for-performance behavior and performance output by quantity ($\hat{\rho}$ = .34; Jenkins et al., 1998). Other evidence suggests that money and cultivating a sense of community are goals that serve conflicting values (Grouzet et al., 2005). Relatedly, Burgoyne and Lea (2006) found that priming money can decrease the extent to which someone is helpful. Thus, evidence suggests PFPs may communicate information about the sender's value structure which would likely influence performance but not performance above and beyond expectations.

2.2 Influence, In-Role Behavior, and Extra-Role Behavior

Cognitive dissonance theory serves as a leading explanatory mechanism for how values-based leader behavior can influence stakeholder behavior (Sosik, 2005). Given that one's value structure represents their prioritization of socially desirable behavior, individuals who act inconsistently with the social expectations they endorse will likely experience guilt, self-deprecation, or shame (Kluckhohn, 1951). Cognitive dissonance theory emphasizes that individuals seek to find stability such that there is minimal dissonance between one's held values and behavior (Festinger, 1959). Consequently, when a leader saliently signals their value structure (i.e., values-based leader behavior), these signals can moderate the extent to which a stakeholder is influenced due to their desire to act in accordance with their value structure. Importantly, acting in accordance with one's value structure may or may not involve acting in accordance with the leader's value structure.

Important for determining the (in)efficacy of values-based leader behavior is capturing the extent to which it influences stakeholders' behavior. Work role behaviors (i.e., in- and extrarole behavior) provide meaningful boundary conditions to measure stakeholder behavior in a way that also provides evidence of influence. Practically speaking, work roles provide workers and managers with a framework for distinguishing required from unrequired work behavior. Inrole behavior consists of the required responsibilities for a role and is the basis of job performance (Katz, 1964). Extra-role behavior is that which benefits or is intended to benefit the organization, goes beyond existing role expectations, and is discretionary (Van Dyne et al., 1995).

In the case of leadership research, a significant increase or decrease of in- and/or extrarole behavior can serve as indicators of influence (Tur et al., 2018). That is, leader behaviors shown to cause a meaningful change in stakeholder behavior provides evidence that the leader behaviors influenced the stakeholder. Although in- and extra-role behavior can both serve as indicators of meaningful behavior change, extra-role behavior can be positioned as a particularly salient manifestation of influence.

Van Dyne and colleagues (1995) put forth three necessary conditions to define extra-role behavior and distinguish it from in-role behavior: (1) that the behavior is not specified in advance by role prescriptions, (2) it is not recognized by the reward system, and (3) it is not cause for punishment when not performed. Although these conditions are limited in that they do not capture all the complexities of work behavior (e.g., a behavior is not listed in a role prescription yet becomes expected work behavior), when used cautiously (i.e., when workers and managers are both clear on the distinction), they provide boundary conditions to identify and distinguish in- and extra-role behavior. Given these conditions, such behavior can provide evidence that a stakeholder was influenced to behave above and beyond expectations by choice rather than through some other forceful mechanism (e.g., manipulation).

Thus, I will leverage the concepts of in- and extra-role behavior to serve as indicators of the extent to which values-based leader behaviors influence stakeholders' performance as well as performance that is above and beyond expectations.

Hypothesis 1: Participants in the CLT (1a), ELS (1b), TLB (1c), and pay-for-performance (1d) conditions will have higher levels of in-role performance than participants in the control condition.

Hypothesis 2: Participants in the CLT (2a), ELS (2b), and TLB (2c), conditions will have higher levels of extra-role performance than participants in the control and pay-for-performance conditions.

Research Question 1: Which values-based leader behavior condition has the greatest influence on in-role performance?

Research Question 2: Which values-based leader behavior condition has the greatest influence on extra-role performance?

CHAPTER 3: METHODS

3.1 Overview of Experiment

The between-subjects, virtual experiment tested whether values-based leader behaviors influence stakeholder behavior. Workers watched an instructional video and were then asked to complete a paid, pro-social task for ten minutes that involved labeling sentences as either nice or not nice. The work-task is prosocial because the data gathered from the workers (whether they think a sentence is nice or not nice) will actually be used to train a machine learning algorithm to identify nice or not nice sentences (e.g., identify mean social media posts and alert the author). Workers were informed in the instructional video that the outlets for this algorithm include our society (the United States) or the entire world.

The workers were randomly assigned to one of five conditions with the difference between each condition being the type of values-based leader behaviors they were exposed to in the instructional video (or not exposed to in the case of the control condition). After completing the ten-minute paid task, the workers were then shown a thank you video that again exposed the worker to the values-based leader behaviors that coincided with their assigned condition. The thank you video also asked the workers if they would be willing to stay for an additional five minutes with no pay to help continue labeling sentences. I examined the effect that the values-based leader behaviors had on influencing the workers' behavior by measuring the number of sentences they labeled during the ten-minute paid task (in-role performance), whether they chose to stay to label additional sentences for no pay (yes/no; extra-role performance), and the number of sentences labeled during the five-minute unpaid task period (extra-role performance).

3.2 Open Data and Materials

The experimental design, hypotheses, and analysis plan were pre-registered on the Open Science Framework and can be found here:

https://osf.io/m3kda/?view_only=e4207833c8054b909ff05abb2077a3b3. Additionally, all materials, data, and analytic code will be made available upon submission of the manuscript to a journal, and a transparency check will be completed.

3.3 Participants

I conducted an a priori power analysis using G*Power (Faul et al., 2009) to calculate the sample size needed to detect a medium effect size (d = 0.30) of values-based leader behaviors on stakeholder performance. The d value of .3 corresponds to observed effect sizes in previous experimental manipulations of values-based leader behaviors (Banks et al., 2023; Ernst et al., 2022; Stock et al., 2023). The analysis suggested a sample size of 540 was needed to detect this effect size at a level of .80 power, with an alpha value of .05.

Temporary workers were recruited through a research listserv recruitment email at a large southeastern university as well as through Prolific to gain a representative sample of university students across the United States. All workers received \$5 compensation for their work, with workers from the large southeastern university receiving payment in the form of an Amazon gift card and workers recruited through Prolific receiving cash. The difference in compensation format was due to varying institutional payment restrictions, with the compensation format expected to have no impact on the study.

The \$5 compensation amount and the expected duration of the study (approximately 20 minutes) equates to a \$15 hourly rate, at minimum. Workers that were randomly assigned to the pay-for-performance condition were offered an additional \$1 for every 50 sentences they labeled.

The 50-sentence amount was determined after a pilot session suggested that participants label on average 132 sentences in 10 minutes. Consequently, with additional motivation, it was estimated that most participants in the pay-for-performance condition would label approximately 132-199 sentences and earn an additional \$2-3. This pay-for-performance ratio serves as an opportunity for workers to receive a meaningful pay increase (approximately 150% pay increase) for increasing their performance output.

3.4 Procedure and Design

The between-subjects, virtual experiment tested whether values-based leader behaviors influence stakeholder performance and performance beyond expectations. To start, the workers were randomly assigned to one of five conditions. The difference between the conditions was the leader behaviors that the workers were exposed to during the five-minute instructional video prior to the in-role task as well as the leader behaviors in the thank you video after the in-role task (see Appendices A-D for the written speeches that were recorded for the instructional and thank you video). The first condition served as the control, with the leader in the instructional and thank you videos enacting standard leader behaviors. The other four conditions contained the enactment of either CLTs, TLBs, ELSs, or PFP values-based leader behaviors, respectively. The content shared in the videos was very similar across each of the conditions such that each worker was informed about the purpose of the task, why it mattered, and how to complete the task.

Following the instructional video, the workers were presented with a short, written description reiterating what they are being asked to do. The control, CLT, TLB, and ELS conditions all received the exact same set of written instructions (see Appendix E). The PFP condition's short written description was adapted to inform workers that they would receive \$1 for every 50 sentences they labeled during the 10-minute in-role task (see Appendix F). The

written instructions also reminded the workers (they were first informed during the instructional video) that the leader's team has the ability to check whether a worker's responses consistently deviated from the norm.

After selecting the arrow at the bottom of the written instruction page, the 10-minute timer began, and the workers were presented with the first sentence. The timer was visible at the top left side of the page counting down from 10-minutes to 0 seconds (e.g., 10:00, 9:59, etc.). The sentences were presented one at a time, in the same order for every worker, and with the option to select whether the worker thought each sentence was nice or not nice. Once the 10-minute timer reached 0 seconds, the page automatically advanced to the thank you video that was associated with the workers' assigned condition.

The thank you videos were each approximately one minute in duration and served multiple purposes. First, the video expressed gratitude to the workers and reminded them of the importance of the task. Second, it exposed the workers in the CLT, ELS, and TLB conditions to more behaviors associated with their assigned condition. Third, the workers were asked if they would be willing to stay for an extra five minutes to label sentences for no pay.

At the conclusion of the thank you video, the workers could advance to the next page where they were presented the question of whether they would be willing to complete the sentence labeling task for an additional five minutes for no pay. If the worker elected to stay, then they would be presented with more sentences to label and a timer on the top of the screen counting down from 5 minutes. If the worker elected not to stay, then they were advanced to demographic questions. Those who elected to stay were advanced to the demographic questions after completing the 5 minutes of extra work. The workers from the southeastern university

needed to provide their university email address to receive payment, which also allowed me to check that participants only participated once.

3.4.1 Leadership Manipulation. An experienced actress was recruited and paid to perform the speeches for all the instructional and thank you videos. The videos were professionally recorded and edited for highest quality.

To write the speeches that were then performed and recorded, the control speech was written first and then adapted for each condition to include the respective values-based leader behaviors. This approach ensured that the experimental conditions were not being compared against a weak or bad control condition (i.e., a poison vs. medicine comparison; Lonati et al., 2018). Care was taken to maintain as much consistency as possible across the speeches (e.g., word count, number of signals) so that the values-based leader behaviors were the only manipulation. The control instructional video speech (i.e., standard leader behavior) contained 956 words. The PFP speech was identical to the control speech. The CLT instructional video speech contained 949 words, a 0.8% difference from the control speech. The TLB instructional video speech had 954 words, a 0.3% difference from the control speech. The ELS instructional video speech contained 971 words, a 1.2% difference from the control speech.

As far as the content and delivery of the speeches, the speeches in the control condition were of good quality with the use of appropriate facial gestures, voice tone, and intentionally contained minimal values-based leader behaviors. The PFP speeches were identical to the control speeches because the concept does not have a taxonomy of leader behaviors with validity evidence. The work to test and develop such a taxonomy of behaviors was beyond the scope of the current project. Instead, the PFP condition received the same instructional video as the control condition, with the leadership manipulation occurring in the written instruction presented

after the instructional video. The PFP condition received additional instruction in bold lettering stating that they will receive \$1 for every 50 sentences that they label.

The speeches for the other three conditions were written to include a mixture¹ of values-based leader behaviors associated with its condition (for a review of the leader behaviors, see Table 2). The ELS speech expressed prosocial values (universalism). This was manifested in the speeches by framing the algorithm's impact as capable of making the world a better place (i.e., that which is good for all) and conveying that workers were hired to help develop this algorithm to reduce the likelihood of biases. The TLB speech expressed developmental (stimulation) and benevolent values (i.e., that which is good for the in-group). These values were manifested by framing how the algorithm could help our society (i.e., more localized than speaking about the entire world) and how this task itself could be a development opportunity for workers. Lastly, given that CLTs are value-laden, they necessarily involve the expression of values but are not restricted in which values the behaviors express. The values in this condition were manifested through emphasizing values that were not as prevalent in the other conditions such as individual achievement ("how much do you want to make a difference?") as well as mentioning how this task can contribute to the prosocial mission of eliminating mean social media posts.

¹ To date, there is no conceptual nor empirical evidence that CLTs, ELSs, or TLBs need to be used in equal proportion (e.g., using each CLT twice in a speech) to increase efficacy. Consequently, I incorporated leader behaviors throughout the speeches where they seemed to fit most naturally.

3.4.2 Manipulation checks. Several manipulation checks were conducted to ensure each experimental speech contained significantly more of its values-based behaviors compared to the other speeches. Results from the manipulation check can be found in Table 3. First, each speech transcript was fed through a proprietary natural language processing algorithm that codes written content for CLTs (Garner et al., 2019). The algorithm identifies the probability that a sentence contains a CLT. This algorithm provided evidence that the CLT speech contained significantly more CLTs compared to the other speeches. Second, each speech transcript was fed through an ELS natural language processing algorithm (Banks et al., 2023) to analyze the number of sentences in each speech that contained an ELS. The algorithm found evidence that the ELS speech contained significantly more ELSs than the other speeches. Third, two trained human raters coded the speech transcripts for TLBs. This approach was taken given that a TLB natural language processing algorithm has not been published. The two experienced coders received a coding guide with definitions of each TLB to score the speech transcripts. The human raters found a significant difference in the amount of TLBs in the appropriate speech compared to the speeches for the other conditions. The observed agreement of 84% between the two coders was acceptable (Cohen's kappa = .68). Estimates of Cohen's kappa of .61 to .80 is considered substantial agreement (Landis & Koch, 1977).

	Control & PFP Speech	CLT Speech	ELS Speech	TLB Speech
CLT NLP Coding (Garner et al., 2019)	5	24	12	3
ELS NLP Coding (Banks et al., 2022)	10	11	21	12
TLB Human	(8, 0)	(9, 2)	(6, 1)	(27, 18)

Table 3: Counts of Values-based Leader Behaviors Incorporated in each Speech

Note: Both the instructional speech and the thank you speech were combined to capture the total number of respective behaviors throughout the entire condition

3.5 Work task and performance measure.

The work task selected for this study consisted of labeling sentences as either nice or not nice. Participants were informed that their input would be used as data to train a machine learning algorithm that could alert individuals if their behavior could be perceived by others as unpleasant. For instance, the machine learning algorithm could be incorporated onto social media platforms to alert people before they post a message that could be perceived as mean or malicious.

To compile the sentences, I leveraged ChatGPT to generate 300 sentences for the in-role task and 150 sentences for the extra-role task. To generate the sentences, I entered prompts such as "Can you provide 20 examples of rude leader behavior with examples of how to say it nicely?" and "What are examples of passive aggressive behavior on social media?" I intentionally generated more mean sentences as this was ultimately more beneficial for training the machine learning algorithm (270 not nice sentences and 180 nice sentences). Additionally, I checked that there were no two sentences the same (see Appendix G for example sentences).

This task was selected for three reasons. First, language classification tasks are commonly used to study human behavior (e.g., Rosch, 1975). Second, the preponderance of

mean and malicious behavior on the internet (e.g., hate speech) is a well-known issue (Matamoros-Fernandez & Farkas, 2021). Creating an algorithm with the purpose of reducing the amount of mean behavior in society is something that most people would agree is a social good. Consequently, it was a non-controversial mission which allowed for greater experimental control. Third, it is a real-world task in that the data will actually be used to train a machine learning algorithm for a separate project and workers were paid a competitive hourly wage for their contribution. Fourth, it is a relatively easy task that does not require a specialized skill set.

One benefit of using Prolific was that workers could easily message me with thoughts or concerns they had. Several messages alluded to how they took the work task seriously. For instance, one worker shared some of the sentences they were unsure whether they were nice or not nice. Another worker said that this algorithm would be very useful and great to have. Thus, although anecdotal, these comments provided further evidence that this was perceived as a realistic and prosocial task.

The performance measurements consisted of objective measures of in- and extra-role behavior. For the in-role behavior measure, I counted the number of sentences workers labeled during the 10-minute paid task. For the extra-role behavior measures, I first captured whether they agreed to stay to voluntarily stay to label more sentences. Then, I counted the number of sentences labeled across each condition (capturing the average and net output produced by each condition).

CHAPTER 4: RESULTS

4.1 Data Preparation and Screening

Data were gathered through Qualtrics and exported as a .csv file to be analyzed in the statistical software package, R. I used Qualtrics's quota feature to prevent oversampling.

Consequently, data collection automatically stopped when the sample reached the targeted 540 complete responses.

I went through a series of screenings before finalizing the dataset for analysis. The first screening involved reviewing participant university email addresses to check for duplicates. This screening yielded zero duplicate participants. Relatedly, Prolific has a built-in feature that limits participants' ability to complete a research study or task more than once. The second screening involved removing workers who did not complete the task. For workers recruited from the southeastern university, completion of the task required that they provide their university email address to receive payment. There were 30 incomplete responses that did not count towards the quota. These partial responses were removed from the final dataset. Although dropping out midway through may be meaningful in and of itself, this exclusion criteria matches Prolific's automatic procedure of deleting a response if the participant stopped mid-way through the task and timed out. The median completion time for the task was 22 minutes and 14 seconds.

The third screening included checking the Prolific data for the presence of bots (i.e., "algorithmically controlled accounts that emulate the activity of human users but operate at much higher pace") (Bessi & Ferrara, 2016, para. 2). Although Prolific has several procedures to safeguard against bots (e.g., submission limitation by unique IP address, Bradley, 2018), bots are important to check for in online research as they threaten the integrity of data quality (Griffin et al., 2022). Potential bots in the data were screened for by comparing demographic information

between that gathered through the Qualtrics survey and users' Prolific demographic data (Griffin et al., 2022). This work indicated bots were not present in the data.

The fourth screening involved analyzing the ratio of times each worker's responses deviated from the norm for each sentence labeled. Consistent deviation from the norm could suggest insufficient effort responding, introducing error into the results. 50% deviation or more was the cutoff point, with 50% deviation or more suggesting insufficient effort responding. This is an imperfect cutoff yet, given that there was not a 50% chance of selecting the right answer at random (270 not nice sentences and 180 nice sentences), would at least identify workers that clearly selected responses at random. The average deviation was 7.6%, with no workers crossing the 50% threshold. Table 4 provides the means and standard deviations for percent deviation from the norm across all conditions.

Table 4: Percent flagged responses mean and standard deviation by condition and role behavior Conditions

	Control		CLT		ELS	ELS			TLB			
	M	SD	M	SD	M	SD	M	SD	M	SD		
In-role Flagged	7.52	5.53	6.06	4.04	10.25	8.78	6.52	5.39	7.69	6.25		
Extra-role Flagged	4.47	4.47	4.36	4.43	6.49	6.95	4.72	4.28	4.52	6.53		

4.2 Descriptive Statistics and Correlations

Participant demographic data broken down by each condition can be found in Table 5 and the same information by each sample in Table 6. Means, standard deviations, and correlations for study variables can be found in Table 7.

Table 5: Participant characteristics by condition

	Control	CLT	ELS	PFP	TLB	Tota	ls
N	111	105	109	104	111	540	-
Women	65	52	54	59	57	287	53%
Men	42	48	52	43	50	235	43%
Non-binary / third gender	2	4	2	0	3	11	2%
Prefer not to say	2	1	1	2	1	7	1%
American Indian	1	1	1	0	0	3	1%
Asian	20	13	16	18	7	74	14%
Black or African American	21	18	24	17	20	100	19%
Hispanic, Latino, or Spanish Origin	4	12	4	7	4	31	6%
Middle Eastern or North African	1	1	0	1	5	8	1%
White	55	44	49	47	55	250	46%
Some other race, ethnicity, or origin	1	2	1	1	2	7	1%
Multi-racial/ethnic	8	14	13	13	18	66	12%

Table 6: Participant characteristics by sample

	Sample 1	Sample 2
N	240	300
Age	33.86	23.63
Women	112	175
Men	123	112
Non-binary / third gender	4	7
Prefer not to say	1	6
American Indian	0	3
Asian	23	51
Black or African American	72	28
Hispanic, Latino, or Spanish Origin	12	19
Middle Eastern or North African	2	6
White	99	151
Some other race, ethnicity, or origin	3	4
Multi-racial/ethnic	29	37

Table 7: Means, standard deviations, and correlations with confidence intervals

Variable	M	SD	1	2	3	4	5	6	7	8	9	10
1. Age	28.19	10.51										
2. Woman	0.53	0.50	04									
			[13, .04]									
3. White	0.46	0.50	14**	01								
			[22,06]	[09, .08]								
4. Control	0.21	0.40	02	.06	.03							
			[10, .07]	[03, .14]	[05, .12]							
5. CLT	0.19	0.40	01	04	04	25**						
			[09, .07]	[12, .05]	[13, .04]	[33,17]						
6. ELS	0.20	0.40	.04	04	01	26**	25**					
a pep	0.40	0.00	[04, .13]	[12, .05]	[10, .07]	[33,18]	[32,17]	A # 11.11				
7. PFP	0.19	0.39	01	.04	01	25**	24**	25**				
0. TRI D	0.21	0.40	[09, .08]	[05, .12]	[10, .07]	[33,17]	[32,16]	[32,16]	2544			
8. TLB	0.21	0.40	01	02	.03	26**	25**	26**	25**			
O. Et1-			[09, .08]	[10, .07]	[05, .12]	[34,18]	[33,17]	[33,18]	[33,17]			
9. Extra-role (Y/N)	0.42	0.49	.22**	06	08	10*	.01	.08	.03	02		
(=,=,)			[.13, .29]	[14, .03]	[16, .01]	[19,02]	[07, .10]	[00, .17]	[06, .11]	[10, .07]		
10. In-role	120.93	48.44	12**	.05	.15**	05	11*	09*	.27**	02	06	
Performance	120.,5											
			[20,03]	[04, .13]	[.07, .24]	[13, .04]	[19,03]	[17,00]	[.19, .35]	[11, .06]	[14, .03]	
11. Extra-role Performance	25.14	33.73	.17**	05	03	08	04	.03	.09*	.01	.87**	.17**
			[.09, .25]	[13, .04]	[12, .05]	[16, .00]	[12, .05]	[06, .11]	[.00, .17]	[08, .09]	[.85, .89]	[.09, .25]

Note. M and *SD* are used to represent mean and standard deviation, respectively. Values in square brackets indicate the 95% confidence interval for each correlation. The confidence interval is a plausible range of population correlations that could have caused the sample correlation (Cumming, 2014). * indicates p < .05. ** indicates p < .01.

Table 5 shows that the randomization was effective, with each condition featuring comparable distributions of participants' demographic characteristics. In terms of worker productivity, there was an average of 121 sentences labeled during the 10 minute in-role task. Regarding extra-role effort, 42% of workers elected to voluntarily stay to label more sentences for no pay. Of those who stayed, there was an average of 59 sentences labeled in the 5-minute extra-role work period. Table 8 provides the averages across each condition for in-role performance and extra-role performance.

Table 8: Performance mean, standard deviation, and total sentences labeled by condition and role behavior

Conditions

	Control			CLTs			ELSs			PFP			TLBs		
In-role	M 116.27	SD 45.31	T 12,906	M 110.16	SD 42.02	T 11,567	M 112.55	SD 43.60	T 12,268	M 147.71	SD 59.60	T 15,362	M 118.92	SD 41.20	T 13,200
Extra- role: all worker	19.80	31.57	2198	22.48	30.25	2360	26.94	32.02	2936	31.23	39.62	3248	25.52	34.10	2833
Extra- role: only worker who stayed	61.06	23.23		51.30	24.56		53.38	24.75		69.11	28.98		62.96	22.30	

Steps were taken to search for meaningful difference between the two samples. An independent two samples t-test found no significant differences between the two samples for inrole performance (t(457.30) = -1.05, p = 0.29) and extra-role performance (t(501.37) = -0.50, p = 0.62). Additionally, binary logistic regression was performed for the decision to stay and found no significant difference (b = .12, p = 0.46)

4.3 Experiment Results

To test Hypothesis 1, that participants in the CLT (1a), ELS (1b), TLB (1c), and PFP (1d) will have higher levels of performance than participants in the control condition, I conducted a one-way ANOVA using the 'stats' package in R (R Core Team, 2013). The results suggest a significant main effect (F(1,538) = 7.98, p = 0.005). A post-hoc Dunnett's test (Dunnett, 1955) using the 'DescTools' package in R (Signorell et al., 2022) revealed that the PFP condition (M = 147.71, SD = 59.60) had a greater influential effect on workers than standard leader behaviors (M = 116.27, SD = 45.31), CLTs (M = 110.16, SD = 42.02), ELSs (M = 112.55, SD = 43.60), and TLBs (M = 118.92, SD = 41.20). This influential effect resulted in the PFP condition collectively labeling 15,362 sentences compared to 12,906 for the standard leader behavior condition, 11,657 for the CLT condition, 12,268 for the ELS condition, and 13,200 for the TLB condition. Thus, only hypothesis 1d received support.

In response to *Research Questions 1*, which asked which values-based leader behavior has the greatest influence on in-role performance, the results found that the PFP condition had the greatest influence on in-role performance.

To address Hypothesis 2, that participants in the CLT (2a), ELS (2b), and TLB (2c) conditions will have higher levels of extra-role performance than participants in the control and PFP conditions, I conducted multiple analyses to gather evidence. First, I conducted binomial

logistic regression to analyze differences in the decision to stay across conditions. To do so, I dummy coded the conditions, using the control condition as the reference group. The results indicated that workers from the ELS condition (b = .75, p = .007) were significantly more likely to stay compared to the control condition, whereas workers from the PFP condition (b = .54, p = .056), CLT (b = .48, p = .086) and TLB (b = .535, p = .21) were not significantly more likely to stay compared to workers from the control condition. Practically speaking, 32% of the control condition, 44% of the CLT condition, 50% of the ELS condition, 45% of the PFP condition, and 41% of the TLB condition chose to stay to complete additional work.

Second, I conducted a one-way ANOVA that compared the extra-role performance of those who stayed for the extra-task from each condition (i.e., excluding those who did not stay). The results suggest a significant effect (F(1, 227) = 3.95, p = 0.048), but a post-hoc Dunnett's test found no significant differences between the control condition (M = 61.06, SD = 23.23) and CLTs (M = 51.30, SD = 24.56), ELSs (M = 53.38, SD = 24.75), PFPs (M = 69.11, SD = 28.98), and TLBs (M = 62.96, SD = 22.30). These results suggest no significant differences between the conditions regarding the number of sentences labeled by workers who chose to stay for the extratask (i.e., their work pace during the extra-role task). Importantly, this analysis was underpowered given that it only included 42% of the total sample.

Third, I conducted a Kruskal-Wallis test that compared the extra-role performance across all workers in the extra-role task (i.e., including both those who stayed and those who did not stay) (Kruskal & Wallis, 1952). The results suggest no significant difference (p = 0.16) in the medians across the conditions.

To answer *Research Question 2*, which values-based leader behavior condition has the greatest influence on extra-role performance, the binominal logistic regression analysis suggests

that the presence of ELSs was the greatest predictor of a worker being influenced to stay for the extra-role task. Regarding performance output, no statistically significant differences were found between conditions.

CHAPTER 5: DISCUSSION

5.1 General Discussion

Values-based leader behaviors have been considered highly effective behaviors capable of influencing stakeholders to perform above and beyond expectations. However, research to date has leveraged numerous conceptualizations which causes concern regarding the extent to which previous studies are referring to and measuring the same concept. Additionally, the overreliance on questionnaires needs triangulated support to provide additional validity evidence for the (in)effectiveness of values-based leader behaviors. The current manuscript took a first step at addressing these issues so that scholars and practitioners can better understand what values-based leader behavior is and to what extent it is effective.

To that end, the first major contribution of this work is providing a conceptualization of values-based leader behavior that draws upon previous related definitions yet avoids the issues they contained. Additionally, it incorporates best practices regarding developing conceptual definitions (Podsakoff et al., 2016) by gathering the key attributes of the concept and ensuring that the definition does not include outcomes (Fischer & Sitkin, 2023). Importantly, this new conceptualization is framed from a signaling theory perspective which positions values-based leader behavior as a way for people to communicate their value structure more saliently. From this conceptualization, we can then research consequential relationships such as the extent to which various behavioral expressions of values appeals to stakeholders and/or influences their behavior.

Based on this new conceptualization, I then identified four manifestations of values-based leader behaviors: CLTs, ELSs, TLBs, and PFPs. Charismatic, ethical, and transformation leader behaviors have often been considered value-based leader behaviors (Banks et al., 2018; House

1996) and all contain value-laden behaviors in their respective definitions. Pay-for-performance is often considered the practical opposite of values-based leader behaviors. However, pay-for-performance strategies can signal the sender's (e.g., leader's or organization's) value structure through the task and goal they are incentivizing workers to achieve. Thus, with a new conceptualization of values-based leader behaviors that is better equipped to be studied rigorously and four operationalizations of the concept, I conducted an experiment to explore the extent to which values-based leader behaviors cause stakeholders to perform above and beyond expectations.

The second major contribution of this study was conducting a randomized experiment that explored the causal effects of values-based leader behaviors. This experiment accomplished multiple objectives. First, it incorporated values-based behaviors that expressed a range of human values rather than focusing only on other-oriented values. Second, it incorporated a realistic work task with consequential work outcomes to evaluate the extent to which values-based leader behavior caused workers to perform above and beyond expectations.

For the first measure of influence, I used the quantity of sentences labeled during the inrole task to measure the extent to which these behaviors impacted performance. For the second measure of influence, I captured workers' decision to voluntarily participate in an extra-role task as an indicator of performance above and beyond expectations. For the third measure of influence, I used the number of sentences labeled by workers in the extra-role task as an indicator of performance above and beyond expectations.

The findings from this experiment found minimal evidence that values-based leader behaviors are an effective tactic to influence performance above and beyond expectations compared to a control group. The results found that pay-for-performance strategies are capable

of positively influencing performance (in-role behavior), and that ELSs are capable of influencing performance above and beyond expectations (extra-role behavior). Most surprising of these findings is that only pay-for-performance strategies had a significant influence on in-role behavior and that only ethical leader signals had a significant influence on performance above and beyond expectations.

Regarding the effect of values-based leader behaviors on in-role behavior, the influence caused by PFPs was not surprising. A vast amount of evidence suggests that PFPs can influence in-role performance (Jenkins et al., 1998). More surprising was that CLTs, ELSs, and TLBs did not significantly influence stakeholders such that it increased their output. The expectation was that these values-based leader behaviors would saliently communicate the leader's value structure more so than the control group, and this information would cause workers to increase their effort and engagement with the task.

A few reasons could explain why there was no significant difference found between CLTs, ELSs, and TLBs compared to the control group. First, CLTs, ELSs, and TLBs may not have saliently communicated (i.e., signaled) the leader's values more so than the control group. That is, the prosocial task that workers across all conditions completed may have saliently communicated the leader's value structure, with values-based leader verbal behaviors having little incremental effect above and beyond the values communicated through the task itself. Second, CLTs, ELSs, and TLBs may have communicated the leader's values such that workers were aware of the leader's value structure priorities, but this information did not influence their behavior to accomplish a higher output than the control group. Third, CLTs, ELSs, and TLBs communicated the leader's values such that the workers were aware of them, and they influenced workers' behavior in the opposite direction than expected. For instance, the CLT and ELS

conditions produced less output during the in-role task compared to the control group, and this may have been caused by CLTs and ELSs influencing workers to focus on the quality (i.e., completing the task slowly and cautiously) of their output rather than the quantity.

Regarding the effect of values-based leader behaviors on workers' extra-role behavior, ELSs were the only behaviors found to significantly increase the likelihood of a worker staying to participate in the extra-role task. This finding was expected and provides evidence that ELSs, which should communicate the leader's value prioritization of prosocial values (i.e., universalism), are capable of influencing stakeholder behavior significantly more than a control group. Although this did not cause the workers in the ELS condition to produce the greatest output across all conditions, it provided evidence that ELSs can influence stakeholders to participate in a task that they are not required to do, will not be punished if they do not do, and will not be rewarded if they do.

Regarding the surprising findings that CLTs and TLBs were not as influential as expected, the results were in the hypothesized direction. Additionally, and practically speaking, CLTs and TLBs were still influential in that 12% and 9% more of workers in these conditions, respectively, chose to stay and participate in the extra-role task compared to the control condition. Findings from related studies found evidence that CLTs caused participants to evaluate a leader more positively (i.e., prototypical leader) as well as increase in-role performance (e.g., Antonakis et al., 2021; Ernst et al., 2021), however, cause no significant effect on extra-role behavior. Relatedly, Stock and colleagues (2023) found evidence that TLBs cause participants to evaluate the leader as more transformational as well as contribute more money to a prosocial good account. Moreover, studies from the values literature have found evidence from across cultures and contexts that the presence of values (e.g., priming stakeholders' values) are

associated with influencing stakeholder behavior such as donating money, sharing and giving, and volunteering to invest time for a social cause (reviewed in Arieli et al., 2020, Sanderson & McQuilkin, 2017) as well as increasing performance outputs on tasks (Bargh et al., 2001; Maio, 2010).

A couple of reasons could explain why CLTs and TLBs did not influence workers to stay to a similar extent compared to ELSs. First, the prosocial nature of the task itself may have been enough to influence more workers from the control group to stay, reducing the observed difference in workers' decision to stay. Second, the ELSs may have been perceived as more costly than CLTs and ELSs, such that ELSs provided workers with a more convincing plea for why they should stay.

Interestingly, although not a statistically significant predictor, workers in the PFP condition performed better than expected regarding the likelihood that they would stay to complete the extra-role task as well as their output during the extra-role task. While this may have been due to chance, future research could further explore potential explanations for this finding to better understand the extent to which PFPs communicate values and are capable of influencing stakeholders to perform above and beyond expectations.

One potential explanation worth exploring further regarding PFPs influence on extra-role behavior is that workers in the pay-for-performance condition felt the need for reciprocity given the additional pay they received beyond the expected \$5. Reciprocity is one of the "rules" of exchange explained by social exchange theory (Cropanzano & Mitchell, 2005). Gouldner (1960) defined reciprocity as a force by which a recipient of a positive act feels an obligation to return, in some form, as much as they were given. Reciprocity could explain, at least to some extent, how PFPs could influence extra-role performance.

A second explanation worth exploring, and the one that aligns most with my proposed conceptualization of values-based leader behaviors, is that the PFP condition provided a costly and salient signal of the leader's value structure. That is, the prosocial mission of creating an algorithm to reduce mean social media behavior coupled with the willingness to pay workers extra for increasing their output communicates that the leader truly cares about this cause. Resulting from this communication, the workers in the PFP condition were then influenced to stay to complete additional work. Future research could explore this relationship further by manipulating the value that is expressed through a task that the leader is asking stakeholders to complete to test whether PFPs saliently communicate values and, if so, the extent to which this influences stakeholders.

A third explanation worth exploring is the extent to which the experimental task and leader behavior manipulations influenced stakeholder behavior. That is, given that the pay-for-performance condition was informed prior to beginning the task of an unexpected incentive that will be based on their performance output, perhaps these workers thought they would receive a surprising reward for their effort in the extra-role task. Future research can explore such psychological mechanisms further.

5.2 Theoretical Implications

5.2.1 Signaling Theory. Evidence from the experiment in this study provides some support for the new conceptualization of values-based leader behaviors proposed earlier in this manuscript. Perhaps the most important contribution of this new definition is the integration of signaling theory. The inclusion of the signaling framework shifts the focus of the concept from how appealing the values message is to focus on the behaviors that serve as conduits of information regarding the sender's value structure. This reframing provides both a clearer definition of values-based leader behaviors and allows it to be studied more rigorously by deconflating the behavior from its effect (whether the value message appealed to others).

Additionally, the integration of signaling theory provides a framework that incorporates the cost of the signal into the communication process. Evidence from the experiment suggests that, although not a statistically significant predictor, paying workers based on their in-role performance may be a costly signal that conveys information about the leader's value structure which can increase the likelihood of stakeholders performing above and beyond expectations.

Bird and Smith (2005) presented four necessary characteristics of behavior for it to qualify as costly signaling. First, others must be able to easily observe the behavior. Second, there must be a cost to the actor's resources, energy, or another significant domain. Third, the signal must reliably communicate information about the signaler, such as their intelligence, health, or access to resources. Fourth, the costly behavior must create some degree of advantage for the signaler. Given that values-based leader behaviors align with these conditions, the signaling theory framework allows for future research to further explore mechanisms through which behaviors are seen as more or less costly as well as the impact this has on their influence.

5.2.2 Values-based Behaviors in Leadership. Values are an important component to bring more central to the conversation of leader behaviors. Over the years there have been intermittent efforts to further integrate values and leadership (e.g., Lord & Brown, 2001). However, given the inclusion of the concept of values as a key attribute in multiple definitions of leader behaviors, understanding the role of values in leader behavior is quite important.

There are multiple benefits that could come from further integrating literature on leadership and values. Values may help with the conversations on construct redundancy that are circulating the leadership literature (e.g., Banks et al., 2018; Bormann & Rowold, 2018; Fischer & Sitkin, 2023). For instance, two behaviors in separate leader behavior taxonomies such as teaching life lessons (TLB) and illustrative examples (ELS) may look very similar and cause scholars to consider whether they are redundant. However, similar behaviors may be communicating different information depending on the values that are expressed through these behaviors. That is, the behaviors themselves may appear redundant on the surface, but the information communicated through the behaviors is meaningfully different. Consequently, values may play an important role in further understanding the extent to which construct redundancy impacts leadership research.

One observation from conducting this study is that additional thought will be needed to determine the extent to which the concept of values-based leader behaviors and charismatic leader tactics are distinguishable. Currently, the definitions are largely overlapping given that charisma covers "values-based" behaviors broadly compared to ethical and transformational behaviors which focus on a specific subset of values. Interestingly, the signaling theory and behavioral revolution was largely initiated by Antonakis and colleagues' (2011; 2016) work on charismatic leadership tactics. These scholars paved the way for the theoretical relationship

between leader behaviors and signaling theory which has allowed for leader behavior concepts to be studied with considerably more rigor. Additionally, Antonakis and colleagues (2016) provided a road map for the need to reconceptualize charisma which was then replicated to enhance other leader behavior concepts (e.g., Banks et al., 2021a; Stock et al., 2023). However, after redefining the concept of values-based leader behaviors, the definition seems largely overlapping with charismatic leader tactics.

A reasonable question is whether the concept of values-based leader behaviors was even needed given that its definition seemingly overlaps significantly with CLTs. The experiment in the current study provides evidence that a meta-level concept that both unites related behaviors and distinguishes them is a meaningful contribution to both theory and practice. That is, the concept of values-based leader behaviors helps explain how two seemingly unrelated leader behavioral concepts, PFPs and ELSs, can communicate information about a leader's value structure which can influence stakeholders to perform above and beyond expectations.

5.3 Practical Implications

5.3.1 Influence. The current study and related studies provide evidence that values-based leader behaviors can influence stakeholders to act in accordance with a leader's or organization's goal. Although the effect sizes vary, even a small effect size can have important practical implications. For instance, if an organization reaches out to a large group of stakeholders to consider donating to charity with the organization agreeing to match the stakeholder's collective donation (a costly values-based signaling behavior at the organization-level; Charness & Holder, 2017), even a small effect size can be a meaningful outcome for the charity and its mission. Relatedly, leaders may be able to leverage values-based leader behaviors to maintain adequate levels of engagement to drive positive business outcomes (Harter et al., 2002).

5.3.2 Leadership Training. Framing values-based leader behaviors as signals regarding one's value structure can be particularly advantageous for leadership training. The current work and related behavioral studies provide evidence that values-based leader behaviors can influence stakeholder behavior. Consequently, a growing body of evidence supports understanding these behaviors as conduits of information regarding the sender's value structure. This perspective allows for a natural progression of helping experienced and emerging leaders understand their value structure. After developing that understanding, the next steps would be helping leaders understand how their behavior can and does express their value structure and how this information can influence stakeholder behavior. This approach to leader training should help enhance both self-awareness (Chon & Sitkin, 2021) as well as aid help leaders create an actionable development plan for continued growth as a leader.

5.4 Limitations and Future Research Directions

One limitation of this work, which is also a common critique of experiments in organizational behavior more generally, is that experiments are limited in their ability to capture the complexities and nuances of workplace behavior (Podsakoff & Podsakoff, 2019). That is, laboratory experiments, although offering control, are often considered artificial in that the manipulation can be short and weak which reduces ecological validity. On the other hand, field experiments, although necessarily having greater ecological validity and tending to have greater external validity than laboratory experiments, are limited in the extent to which extraneous variables can be controlled. The current study attempted to strike a balance between the advantages and limitations of both by conducting a virtual experiment that incorporated a realworld work task. The virtual environment via an online platform allowed for a considerable amount of control and the real-world work task increased the ecological validity. Additionally, to address concerns of a weak experimental manipulation, this study added a second leader behavior speech (e.g., the thank you speech) to strengthen the manipulation. These components, while not making the perfect organizational experiment, created the conditions necessary for causal determinacy and building our collective understanding of values-based leader behaviors.

Future studies could extend this work by conducting field experiments where leaders and team members have a true longer-term relationship. For instance, the organization could organize values-based leader training for team leaders or emerging leaders (e.g., high potential candidates). Researchers could then analyze individual, team, and organizational metrics (e.g., promotion rates, team and organizational performance, retention, engagement) and compare the values-based leader behavior trainees to a control group (e.g., trainees who went through a standard leader training) or individuals who did not receive any training.

A field study investigating the longitudinal nature of work relationships could be a particularly important area to investigate values-based leader behaviors. Overtime, the likelihood increases that leaders would act in disaccord with their most commonly expressed values (Morrison & Robinson, 1997). For instance, if the leader often expresses and has a reputation for valuing universalism and caring for others but makes a decision (or multiple decisions) that appear to value their own well-being at some cost to others (e.g., Adams et al., 2011), stakeholders viewing this behavior may see these values as incompatible. This may then influence stakeholders' evaluation of the leader (e.g., view the leader negatively) which could hinder the leader's ability to influence others to accomplish the mission or goal. Thus, a general research question worth exploring in future research is: to what extent do values-based leader behaviors pose a risk to the signal sender?

A second limitation of this study is the restricted range of enacted values in the leadership manipulation. The limited range of selected values is in part due to designing a feasible experiment with a sample size that could realistically be attained. That is, to manipulate each value would have required ten (basic values) or nineteen (further refined values) conditions. The restricted range of enacted values was also due to the limited emphasis that leadership research has placed on the values component. To my knowledge, only CLTs, ELSs and, TLBs 1) contain the enactment of values in their respective definitions and 2) have a behavioral taxonomy with validity evidence. Future research should continue to integrate and explore the leadership literature and Schwartz's theory of values to gain a better understanding of how these values are enacted as well as the effect they have on stakeholders.

A third potential limitation of this study is the use of a student only sample. This too is a common critique of experiments in the organizational sciences (Podsakoff & Podsakoff, 2019).

The primary argument of the critique being that the findings of a student only sample are not generalizable (i.e., lack external validity). However, evidence suggests that laboratory studies (which often involve student samples) tend to have greater external validity than critics suggest and, perhaps more importantly, offer a place where researchers can test theory in a controlled environment (Dobbins et al., 1988). To that end, I have reviewed and selected concepts that align with my overall research questions, identified their best operationalization to answer the research questions, and designed an experiment that involves a real work task to increase the ecological validity and external validity. Additionally, values-based leader behaviors and their effects theoretically apply to more than only adults in a professional work environment. Thus, the student only sample provided an appropriate environment for early theory testing.

Future research could explore research questions regarding values-based leader behaviors by using different methodologies and targeting diverse contexts. For instance, future studies could use textual analysis to explore social media posts for higher and lower amounts of values-based behaviors and compare engagement with the post (e.g., likes, comments, reposts; Ponizovskiy et al., 2020).

A fourth limitation of this work is using an outcome variable, extra-role behavior, which has a history of being conflated with in-role performance, is related to a proliferation of similar constructs (e.g., organizational citizenship behavior), and has over-relied on evidence from questionnaires. Consequently, extra-role behavior does not have a strong collection of validity evidence. However, this framework was selected given its conditions that, when used cautiously, allow for a clear distinction between in-role and extra-role behavior. Future research should further refine the concept of extra-role behavior to differentiate it from in-role behavior.

5.5 Conclusion

The current study proposed a conceptual refresh for values-based leader behaviors, reframing the concept as conduits of information regarding the sender's values structure. A virtual experiment provided evidence that such behavior is capable of influencing stakeholder performance above and beyond expectations. This work contributes to a growing body of evidence that values-based leader behaviors may have important implications for leader and organizational signaling behavior, and that training on such behavior may be advantageous for emerging and experienced leaders.

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APPENDIX A: STANDARD AND PAY-FOR-PERFORMANCE LEADER BEHAVIOR IN-ROLE AND EXTRA-ROLE SPEECHES

Standard Leader Behavior and Pay-for-Performance Leader Behavior In-role Speech - https://youtu.be/ISHyHNRCn-o

Hi. My name is Lauren, and I am working with the team that is leading this initiative.

I'm here today to brief you on the importance of what you are about to do.

In the next couple of minutes, I want to explain the nature of this initiative and why we are recruiting people to help label text.

Of course, you are here to work on a labeling task for a little while and you will also get paid.

That is clear.

But, at the same time your efforts will also help my team achieve its mission of helping people better understand the positive and negative implications of the text in their social media posts.

Your efforts will make a difference because the text you label will be used to help develop an algorithm capable of providing feedback to people before they post something on social media that may be harmful.

For example, teenagers and even adults sometimes engage in passive aggressive behavior online or bullying behaviors that hurts other people's feelings.

These comments can be destructive and harmful in many different ways.

Our algorithm will be able to identify the passive aggressive or bullying behavior and alert them before posting to social media or sending the message to someone.

Another use of the algorithm could be in a work setting, helping business leaders determine what we all tend to consider appropriate behavior.

For instance, how to write a good email compared to behavior that is inappropriate or ineffective.

Therefore, the job you are about to do is really important for a number of different reasons.

Every day some people are exposed to unpleasant or malicious comments or actions online.

These comments or actions may be directed at us, or we may witness them being directed toward other people.

This issue seems to be worsened by the ever-growing influence that social media has on our lives.

This is an unfortunate problem, and one that my team thinks we can help address by developing this algorithm.

Now let me tell you about the behaviors you will be coding.

We have examples of unpleasant sentences as well kinder sentences, and we're asking you to select whether you think a sentence is appropriate or whether it could be seen as unpleasant behavior.

The sentences that you code will become data points that help train our algorithm to identify unpleasant or malicious behavior.

Once we have enough data, the algorithm can then be used to alert people when a social media post or email they are typing may be perceived by others as unpleasant.

Each sentence you label today can potentially help reduce the amount of unpleasant online behavior.

A simple nudge from a software tool may be all it takes to convince someone to rewrite their message to make it more pleasant and less harmful.

Our team is dedicated to doing whatever we can to help people better understand the implications of our online behavior.

The text that you label today will help us work toward this mission, and should ultimately help reduce the amount of unpleasant social media posts we experience.

Every sentence you label will make a difference.

We will also be checking for accuracy by comparing your answers to the rest of the group.

We are not expecting everyone to answer exactly the same for every sentence, but we will be able to tell if anyone's responses consistently differ from the norm across the board.

So, I want you to be professional when you are doing this job.

If you work hard and focus, you can label a lot of text.

You will receive payment for this task regardless of how much text you label, but the more you do, the better.

The more text you label, the faster we can have enough data to support our tool.

The task itself is quite simple.

You will read a sentence and then indicate whether you think it is pleasant or unpleasant behavior.

Make sure to provide as accurate of a response as you can.

We don't want text that is labeled inaccurately, because inaccurately labeled text will reduce the extent to which the algorithm can actually be an asset.

Also, while you work on this task, please think of the amount of unpleasant and malicious behavior that you might be able to reduce, because every sentence you label may be able to help.

As you get into the work of labeling the text, you might be tempted to only do the minimum requirement —you might think that your extra effort won't really help.

But this is not true.

Just think of all the other people we have hired to do this task as well.

Remember that the more text you label, the faster we can develop an algorithm and share it with others to use.

At the end of the day, if everyone works hard we will be able to make a much bigger difference, which is really what matters most of all.

So please do your best by doing your job as well as you can and to the best of your ability, because doing so will really help make a difference.

Of course, this will help you to earn some money too, so we are all winning here.

As you are working on this text labeling task remember that each response is important, so please pay attention to your work and do the best that you can.

Thank you for listening to me.

You may now begin the task.

Standard Leader Behavior and Pay-for-Performance Leader Behavior Extra-role Speech - https://youtu.be/t1HGrJnbOJE

Thank you for your hard work and effort on that text labeling task.

Your efforts have been invaluable to our mission of helping people better understand the positive and negative implications of the text in their social media posts.

We truly appreciate your contribution to this important cause.

As we continue to work towards our mission, we would be honored if you stayed for five more minutes to continue to help us with this task.

Each sentence you label today can potentially help reduce the amount of unpleasant behavior people use in their behavior online.

The task would be the exact same as before.

We won't be able to pay you for any additional work you do.

However, the more labeled text we have the faster we can develop this algorithm.

If you're unable to stay longer at this time, we understand and we will by no means hold it against you.

You will receive payment for the 10 minutes of work you have already completed regardless of your decision to stay for another 5 minutes.

If you've decided to stay, please advance to the next page and select the "yes" option.

If you've decided not to stay, please advance to the next page and select the "no" option.

Regardless of your decision, we thank you for your time and effort today.

APPENDIX B: CHARISMATIC LEADER TACTIC IN-ROLE AND EXTRA-ROLE SPEECHES

Charismatic Leader Tactics In-role Speech -- https://youtu.be/4tsjeBela8U

Hi. My name is Lauren and I am working with the team that is leading this initiative.

I'm here today to brief you on the importance of what you are about to do.

In the next couple of minutes, I want to explain 1) the nature of this initiative, 2) why we recruit people to label text, and 3) how this task can ultimately have a positive impact on society.

Of course, you are here to work on a labeling task that you will be compensated for, but that's only one piece of the puzzle.

Your efforts will also help my team achieve our ambitious mission of eliminating mean and malicious behavior from social media.

You may be asking yourself, "How could my efforts on this task possibly contribute to the elimination of mean social media behavior?"

Your efforts will make a difference because the text you are about to label will be used to develop an algorithm that can identify mean or malicious social media posts before they're posted, and alert the individual about the potentially harmful content in their message.

Just the other day, I saw someone post about one of their coworkers being stupid and I couldn't believe why they thought that was an appropriate use of social media.

Have you ever seen a post similar to that and wondered the same thing?

I wouldn't be surprised if you have.

Perhaps you are already thinking of other ways this algorithm could be used.

Another area where we think it could potentially be used is in a business setting to help train leaders on what behavior is appropriate compared to behavior that is inappropriate or ineffective.

For instance, if a team member makes a mistake, does the manager blow a fuse and email them back screaming at them, or do they make the mistake into a teaching moment.

Therefore, the job you are about to do may not only contribute to a more positive social media experience, but may also contribute to better work experiences.

Now let me tell you about the text you will be labeling.

Every day some people are exposed to these unpleasant or malicious comments or actions online.

These comments or actions may be directed at us, directed toward other people, or just rotten statements directed at no one in particular.

This issue seems to be worsened by the ever-growing influence that social media has on our society.

To me, this issue in our society has become like a toothache; no matter what I am doing, I can almost always feel the ache and pain of this mean and malicious behavior.

To begin to address it, we have examples of text from unpleasant comments and posts as well as examples of text from kinder comments and posts, and we're asking you to indicate whether you think the example is pleasant or unpleasant behavior.

Some examples may seem clearly pleasant, some may seem clearly unpleasant, and some may seem to exist in a gray area where it is not exactly clear.

For those that are not as clear, we ask that you use your best judgement.

The text that you label will become data points that help train an algorithm to decipher unpleasant or malicious behavior from pleasant and appropriate behavior.

Once we have enough data, the algorithm can then be used to alert people when a social media post or email they are typing may be perceived by others as unpleasant.

You could think of the algorithm as a shoulder angel that not only discourages people from doing the wrong thing, but also encourages people to do the right thing.

A little tap on the shoulder from an algorithm may be all it takes to convince someone to rewrite a message to make it more pleasant and less harmful.

This task is a relatively simple one, but its potential impact is quite profound.

The more text you label today, the faster we can bring this algorithm to the public, the faster we can eliminate mean behavior, and the faster we can make a difference.

I think it's safe to say that we would all enjoy and benefit from more positivity.

So, how hard are you willing to work to help us get there?

The more text you label, the sooner we might be able to live in a world where less of these painfully negative social media posts and comments are said to one another.

You will receive payment for this task regardless of how much text you label, but I want you to think of how much of an impact could be made with less negative social media posts, less mean texts, and less mean managers.

Also, we have the capability to check for accuracy by comparing anyone's answers to the rest of the group.

We are not expecting everyone to answer exactly the same, but we will be able to tell if anyone's responses consistently differ from the norm.

I am confident that you will do your very best to label the text as accurately as possible.

Inaccurately labeled text will reduce the extent to which the algorithm can actually be an asset.

I'm confident that if we work hard, we work accurately, and we work together, we can make a difference.

And, with your help, I'm confident that we can work towards our ambitious goal of eliminating mean and malicious behavior from these different areas of our life.

Thank you for listening to me.

And, once again I ask you, how much do you want to make a difference?

You may now begin the task.

Charismatic Leader Tactics Extra-role Speech – https://youtu.be/gtdcSRQaWE8

I want to thank you for your hard work, effort, and focus on that text labeling task.

Achieving our mission of eliminating mean and malicious behavior on social media is like running a marathon, and your effort today got us closer to crossing the finishing line.

You helped us take one more step to advance this important cause.

As we continue working towards our ambitious mission, we really need all hands on deck.

Would you stay for 5 more minutes to help us label more text?

We won't be able to pay you, but think about the impact that could be made with less negative social media posts, less mean texts, and less mean managers.

I know you're likely very busy but of all of the ways to spend a few minutes, why not spend it contributing to something impactful?

We're not asking you to work around the clock on this; we're only asking for five minutes.

APPENDIX C: ETHICAL LEADER SIGNALS IN-ROLE AND EXTRA-ROLE SPEECHES

Ethical Leader Signals In-role Speech - https://youtu.be/ETnuhPIZVIM

Hi. My name is Lauren, and I am working with the team that is leading this initiative.

I'm here today to brief you on the importance of what you are about to do.

In the next couple of minutes, I want to explain the nature of this initiative, and how today you have the opportunity to help us make our world a better place.

Our mission is to encourage our world to use more ethical behavior in their online interactions, and discourage the use of unethical behavior.

At least once a day, I witness a post on social media that is just flat out malicious or mean.

It may be an attack on someone else or just being rude for what to me is no good reason.

To me, it's of the utmost importance that we do something about this.

That's why my team and I are working to develop an algorithm that can label text as either ethical and appropriate for social media or unethical and inappropriate.

From the inception of this plan to develop an algorithm, my team and I knew that the right way to train this algorithm was to collect the opinions of many different people.

Doing it this way ensures that the data informing our algorithm are representative of what most people tend to think is either right or wrong.

If it were only my team and I to simply decide what we thought was right and wrong, then clearly our biases would impact the data being used to train the algorithm.

We felt it was important to create an open environment where many people, just like yourself, can provide their input on what they find to be appropriate and inappropriate behavior.

That way, this algorithm could ultimately help make a world that most people find to be truly better.

For the task, we have a lot of text that contains examples of human behavior.

We are asking that you read a line of text and label whether you think the behavior is appropriate or inappropriate.

The behaviors may be something someone might say on social media, or it may be something someone might say throughout the day.

Some may be very clear examples of someone doing the right thing, such as showing grace to someone who has made a mistake and allowing them to learn from that mistake.

Or on the contrary, some may be very clear examples of someone not doing the right thing, such as telling someone that they are stupid and useless.

Some examples may exist in a gray area, where it is not exactly clear whether the behavior is morally right or wrong.

For these, we ask that you use your best judgement.

Having all of you label these sentences helps ensure that it is not the biases of just a few people influencing this algorithm.

Instead, we are intentionally opening it up to as many people as possible to determine what is right or wrong.

We believe an algorithm like this can truly help make our world a better place by encouraging people to act more ethically and appropriately in addition to discouraging people from acting unethically and inappropriately.

I want to show you how this algorithm could reward and encourage ethical behavior as well as discourage unethical or inappropriate behavior.

Imagine someone posting a kind message on social media or texting someone a compliment.

Now imagine an algorithm being able to reward them with a smiley emoji or a "thanks for being kind" today message.

We don't necessarily need that positive reinforcement in order to act ethical and appropriate, but we know that rewarding behavior can increase the likelihood that we do it again.

My team and I want to try to leverage this in order to make this world a better place.

Now imagine someone texting or posting something mean and inappropriate, and for them to receive a nudge from the algorithm to rephrase the message.

The nudge would discourage them from posting the mean message, and encourage them to rephrase the message.

I want to be transparent about where we are in the life cycle of this project.

Once we collect all of these data we will need to develop the algorithm and test whether it actually has a meaningful effect on increasing people's ethical behavior and reducing unethical behavior.

My team and I would never take this out to the public without first testing it and exploring any potential unintended consequences of people using this algorithm.

We are very optimistic, however, that the widespread use of this algorithm can make this world a better place.

You will receive payment regardless of how many sentences you label, but the more sentences you label the faster we can collect the data we need to begin testing this algorithm.

Also, we have the capability to check for accuracy by comparing anyone's answers to the norm for the rest of the group.

We are not expecting everyone to answer exactly the same, but we wanted to be able to evaluate the integrity of the data given the impact it could have on society.

If we all work honestly and hard, then we can collect the data faster to inform this algorithm and get to the testing phase even faster.

There's no guarantee that this algorithm will help make an app that can make this world a better place, but I would say it's at least a big step in the right direction.

As you are working on this sentence labeling task, remember that your work today can make this world a better place.

Thank you for listening to me.

You may now begin the task.

Ethical Leader Signals Extra-role Speech - https://youtu.be/Dc7YD04WOLQ

Thank you for your hard work on that task.

Your efforts have helped advance our mission of encouraging others to use more ethical behavior, and discourage the use of unethical behavior.

We truly appreciate your contribution to this important cause.

To develop this algorithm the right way, we need help from a lot of people, such as yourself, so that we can evaluate this content in a fair and unbiased way.

Would you stay for 5 more minutes to help us label more text?

We won't be able to pay you, but remember that your work today will make this world a better place.

To be clear, leaving isn't necessarily the wrong thing to do, but the amount of good that could be generated from even a few people staying is immeasurable.

Generally, I think the right thing to do is to try to act in a way that makes this world a better place, and helping with this task is one way that you can do that.

If you've decided to stay, please advance to the next page and select the "yes" option.

If you've decided not to stay, please advance to the next page and select the "no" option.

Regardless of your decision, thank you for helping us develop this algorithm the right way, so that one day it can encourage and perhaps reward ethical behavior.

APPENDIX D: TRANSFORMATIONAL LEADER BEHVAIOR IN-ROLE AND EXTRA-ROLE SPEECHES

Transformational Leader Behavior In-role Speech - https://youtu.be/sndnnyVz04M

Hi. My name is Lauren and I am working with the team that is leading this initiative.

In the next couple of minutes, I want to explain the nature of this initiative, and why we recruit people to help label text.

The mission behind this initiative is to transform the way we interact with others by seeking the perspectives from different people, such as yourself, asking you to label examples of human behavior as either appropriate or inappropriate.

This initiative started from a conversation I was having with a friend, when we were questioning why we as a society tend to tolerate so much negativity to fill our social media feeds and even just our everyday lives.

So often, we are exposed to passive aggressive behavior online or even bullying behavior that clearly hurts other people's feelings.

At times, when we are not at our best, we may even be the ones acting passive aggressively or posting mean content.

My friend and I couldn't help but wonder how our society got here, and we couldn't help but ask ourselves if this is really how we as a society should be treating one another.

We were cycling through many of the life lessons we had learned growing up, such as "If you don't have anything nice to say, then don't say anything at all."

Or, "Do unto others as you would have them do unto you."

Part of me wishes we were able to do this task in person so that I could ask you all for some related life lessons you have learned about how we should treat other people.

However, the other part of me knows that we are able to reach so many more people by doing this task virtually.

Anyway, my friend and I couldn't understand why even though life lessons like these were commonplace in many childhoods throughout our society there is still so much mean and malicious behavior out there, particularly on social media.

And, with this issue being so pervasive, I occasionally ask myself if most of us just assume that there's nothing we can do about it.

However, I want to push back on those thoughts, and I encourage you to do the same if you have them.

I want you do a quick thought experiment and consider how powerful it could be if we collectively question that assumption...the assumption that we can't do anything about this issue.

After doing that, consider this, think about how powerful it could be if we all work together to encourage people to use more positive online behavior.

That brings us to why you are here today.

The task you are about to do is an opportunity for all of us to put our diverse and great minds together and use our best judgement to determine what type of behavior we wish to encourage throughout our society.

For this task, we have examples of inappropriate and unpleasant text as well as appropriate and kind text, and we're asking for your perspective on whether you think the text is appropriate or whether it could be seen as unpleasant.

The sentences that you code will become data points that help train our algorithm to identify unpleasant or malicious behavior.

Once we have enough data, the algorithm can then be used to alert people when a social media post they are typing may be perceived by others as unpleasant, and propose an alternative option that's more pleasant.

We think that the alternative option proposed to people can also be viewed as regular developmental opportunities, reminding them throughout the day to intentionally be kind to others.

It is becoming common knowledge that negative social media behavior can have a significant impact on individuals' mental health, and we are determined to encourage people to question the underlying assumption that there's nothing we can do about this.

When we first came up with the idea to develop this algorithm, we considered just having our own team code the behavior.

However, we quickly realized that it was critical to seek out the perspectives of a diverse sample in order to develop an algorithm that is informed by many people throughout our society.

So, the more effort we put in today, the faster we can develop this algorithm.

The faster we can develop this algorithm the sooner we can begin nudging people to act more kindly toward others by suggesting alternative options to their messaging.

Over time, these nudges may even help change people's behavior to be kinder overall.

We will also be checking for accuracy by comparing your answers to the rest of the group.

We are not expecting everyone to answer exactly the same for every sentence, but we will be able to tell if anyone's responses consistently differ from the norm across the board.

What you have before you is a very simple task that can have a profound effect on our society.

As you complete this task, think about the benefit this could have on our society.

Also, please think about other uses for this algorithm.

Another outlet we are also pursuing for this algorithm is to transcribe work meetings and then have the algorithm code the meeting leader's behavior to provide feedback as a development opportunity.

We are also open to any ideas you may have on how this algorithm could be used to impact society in a positive way.

As you are working on this text labeling task, think about a life lesson that stands out to you about how we should treat others, and consider sharing it with someone later.

Thank you for listening to me.

You may now begin the task.

Transformational Leader Behavior Extra-role Speech - https://youtu.be/SqBngy8-Tbw

Thank you for your hard work on that task.

Your efforts have helped advance our mission of transforming the way we interact with others by seeking the perspectives from different people, such as yourself.

This task makes me think of something my mentor said, "People's lives can be significantly influenced by your actions that you underestimate."

The way I see it, there are likely many times when people post mean or malicious messages on social media without any consideration for how it impacts others.

If you too were reminded of a life lesson you've heard before, I encourage you to go share it with someone today.

As we continue working toward our mission, we truly value seeking as many perspectives as possible on what people think is right or wrong behavior.

Would you stay for 5 more minutes to help us label more text?

We won't be able to pay you, but you are creating tremendous societal value.

Perhaps you are also finding this task to be somewhat developmental for yourself.

If you've decided to stay, please advance to the next page and select the "yes" option.

If you've decided not to stay, please advance to the next page and select the "no" option.

Regardless of your decision, remember the lesson credited to Aesop. "No act of kindness, no matter how small, is ever wasted."

APPENDIX E: STANDARD LEADER BEHAVIOR, CLT, ELB, TLB WRITTEN INSTRUCTIONS

We would like to confirm that you are being asked to label text for 10 minutes and in return you will receive \$5 compensation. As a reminder, we will be checking for accuracy. While we do not expect everyone to respond exactly the same, anyone whose responses consistently deviate from the norm will be flagged in the system.

APPENDIX F: PAY-FOR-PERFORMANCE CONDITION WRITTEN INSTRUCTIONS

We would like to confirm that you are being asked to label text for 10 minutes and in return you will receive \$5.00 compensation. **On top of this base pay, we will give you an additional \$1.00 for every 50 sentences that you label**. As a reminder, we will be checking for accuracy. While we do not expect everyone to respond exactly the same, anyone whose responses consistently deviate from the norm will not be eligible for the additional pay of \$1.00 for every 50 sentences.

APPENDIX G: EXAMPLE OF SENTENCES FROM THE LABELING TASK

Q9 You're a good manager, for someone who's so hands-off.
○ Nice
O Not nice
Q10 I only work with the best and the brightest.
O Nice
O Not nice
Q11 Your presentation was great, but I think we could have a stronger impact by adding some data to support your points.
O Nice
O Not nice
Q12 You are a great problem solver and always find innovative solutions.
O Nice
O Not nice
Q13 I think you're a great listener, but sometimes you can come across as too passive. Have you thought about being more assertive when expressing your opinions?
○ Nice
O Not nice