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Exploring the Intersection of Ethical and Virtuous Leadership: An Analysis of Correlation and Interchangeability of Measurement Tools

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Abstract

Exploring the nuanced dimensions of leadership within contemporary organizational contexts, in this study, I delved into the correlation and interchangeability between virtuous and ethical leadership paradigms. Anchored in a methodological framework that includes a thorough literature review and a correlation research design, I assessed the relationship between perceptions of virtuous leadership (measured by the virtuous leadership questionnaire) and ethical leadership (measured by the ethical leadership scale) among leaders and subordinates across a representative demographic of the professional business environment. Drawing from a qualified participant pool of 533, I found a statistically significant, direct, and robust correlation ($r = .91$, $p < .001$) between virtuous and ethical leadership perceptions. Simple linear regression analysis showed that perceptions of virtuous leadership significantly predict those of ethical leadership, explaining 83.02% of the variance in ethical leadership perceptions ($F_{(1,531)} = 2{,}596.06$, $p < .001$, $R^2 = .83$). These findings illuminate the close alignment between the constructs of virtuous and ethical leadership and suggest the potential use of their measurement instruments interchangeably without modification. By challenging traditional leadership models and advocating for an integrated approach to moral leadership, I highlight the critical importance of fostering both ethical behaviors and virtuous traits for effective leadership. A discussion of the implications for leadership development within organizations and outline directions for future research is provided, emphasizing the need for a holistic approach to cultivating leadership qualities that enhance organizational culture and effectiveness.

Keywords: ethical leadership, virtuous leadership, ethical leadership scale, virtuous leadership questionnaire

Dedication

This dissertation is dedicated to those who have been my anchor and my North Star throughout the challenging and rewarding journey of earning this degree. First and foremost, to my wife, Cathy, whose boundless support and sacrifices have been the backbone of my pursuit. Cathy, you have been my rock, enduring the long hours and absences, managing our household, caring for our children with unwavering dedication, and ensuring our home was a place of peace and progress. Your ability to juggle countless responsibilities while being my steadfast supporter is nothing short of miraculous. I am forever grateful for your love, patience, and sacrifice.

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Chapter 1 – Introduction

Leadership is critical for organizational success. The challenges that professional, academic, and governmental organizations worldwide face today, require a change in basic assumptions in leadership theory. Such a significant shift should emphasize principled, values-based, moral, ethical, virtuous, and thoughtful leadership that benefits the individual, team, and organization. Traditional methods of leadership theory, such as trait, behavioral, and situational theory, lack a comprehensive or systematic framework for developing leaders with a sense of higher purpose or deep moral and spiritual dimensions (Benmira & Agboola, 2021). Though certain styles, such as transformational leadership, offer a greater sense of purpose via mentorship and interprofessional cooperation, they still fail to provide a satisfying approach. Thus, a profound personal transformation is necessary to acquire leadership skills. This work involved a correlation analysis of the measurement instruments of two leadership styles—ethical and virtuous— to clarify and successfully implement the most appropriate and effective leadership practices.

Background

Brown and Treviño (2014) emphasized the importance of developing leaders with a higher purpose and superior moral dimensions. Recently, researchers have explored the relationship between virtuous leadership and organizational outcomes, indicating that virtuous leadership positively affects employee job satisfaction, organizational commitment, and performance (Hannah et al., 2020; Kuenzi & Schminke, 2016). In additional empirical studies, researchers have further addressed the relationship between ethical and virtuous leadership using measurement tools such as Wang and Hackett's (2016) virtuous leadership questionnaire (VLQ) and Brown et al.'s (2005) ethical leadership scale (ELS). These scales are used to achieve a comprehensive, valid, and reliable measurement of ethical and virtuous leadership. Overall, research continues to emphasize the importance of developing leaders with a moral and values-based approach. As such, developing reliable measurement tools is crucial for furthering the literature and comparative analysis of empirical studies in this field (Zhang et al., 2019).

Ethical Leadership

Ethical leadership has been a topic of interest for centuries, with early philosophers such as Aristotle (2000) discussing the importance of leaders' ethical conduct and its potential impact on citizens, nations, and the world. It was, however, not until approximately 20 years ago that the academic discourse on ethical leadership began with the seminal research by Ciulla (1998) that placed ethics at the heart of leadership. Treviño et al. (2000, 2003) followed Ciulla's work, suggesting that ethical leadership comprises both moral qualities and managerial practices applied consistently. Specifically, a leader with moral traits fosters ethical conduct among subordinates by establishing their moral character. Essentially, the leader leads by example, creating an environment where moral aptitude is not only an expectation but also a requirement. Brown et al. (2005) established and influenced the concept of ethical leadership by emphasizing the importance of aligning behavior with established norms and encouraging followers to adopt such behavior through a two-way communication, reinforcement, and decision-making.

A reliable and extensively tested measurement scale is necessary to establish ethical leadership as a distinct area of study. The ELS has been a subject of significant research, beginning with the seminal work of Brown et al. (2005) in developing and evaluating its effectiveness in measuring ethical leadership. Other measurement tools, such as the ethical leadership questionnaire by Yukl et al. (2013) and ethical leadership at work scale by Kalshoven et al. (2011), have also been used in the assessment of ethical leadership. Developing and using a reliable measurement scale for ethical leadership will facilitate further research and comparative analysis of empirical studies in this emerging field. Because the ELS is the most researched scale, I used it for correlation analysis in this study.

Virtuous Leadership

Virtuous leadership and the use of virtue ethics as a framework for business ethics have garnered increased attention in recent years, as evidenced by the growing body of research in this area (Banks et al., 2016; Crossan et al., 2013; Flynn, 2008). Cameron (2021), for example, posited that virtuous leadership focuses on maximizing the potential of human systems and promoting ethical behavior. However, research suggesting that

responsible leadership is founded on virtuous principles supplanted this position (Hackett & Wang, 2012). Virtuous leadership scales primarily comprise self-assessment tools, including the virtuous leadership scale (VLS; Sarros, Gray et al., 2006), the virtue ethical character scale (Chun, 2005), and the VLQ (Wang & Hackett, 2016).

Statement of the Problem

Accurate and defined measurement of virtuous and ethical leadership remains a consistent challenge in leadership studies (Sarwar et al., 2020; Shin & Kim, 2021). Despite the development of several tools, consensus on the definition and measurement of both virtuous and ethical leadership is still lacking, disallowing comprehensive or succinct results due to inconsistencies (Hannah et al., 2020). Each measurement scale is accompanied by its variables, processes, and techniques and is used to measure various aspects of leadership. Further development of comprehensive tools oriented toward ethical and virtuous leadership is necessary. Studies highlighting the conceptual and empirical relationship between ethical and virtuous leadership continue to fall short in their explanations (Korsgaard, 2020). Although some researchers have suggested a significant overlap between these two leadership approaches (Banks et al., 2016; Bedi et al., 2016), their findings are not definitive, suggesting a need for further investigation to understand what correlation, if any, exists between the two.

In addition to understanding the conceptual and empirical relationships between ethical and virtuous leadership, researchers have emphasized the importance of examining the contextual factors that influence the effectiveness of ethical and virtuous leadership (Brown & Treviño, 2014; Zhang et al., 2019). For example, a recent meta-analysis by Sarwar et al. (2020) stressed the need for a clear understanding of the relationship between ethical and virtuous leadership, suggesting that several factors may moderate it. Addressing these issues will lead to a better understanding of the complex nature of leadership and inform the development of effective practices in professional, academic, and governmental organizations. Therefore, it is crucial to conduct further research to develop reliable and valid measurement instruments for ethical and virtuous leadership through exploring the conceptual, empirical, and contextual factors that influence their effectiveness.

Purpose of the Research

In this study, I investigated the relationship between virtuous and ethical leadership and the correlation and possible interchangeability of measurement instruments for each as well as the effectiveness of each approach. For example, Liu et al. (2023) argued that virtuous leadership can promote ethical behavior in organizations and suggested that ethical leadership can enhance employee job satisfaction and commitment. Ehrhart et al. (2019) found that ethical and virtuous leadership can positively affect employee well-being and organizational outcomes.

Researchers have also emphasized the importance of accurate measurement in leadership research. Banks et al. (2016) noted the need for alignment between measurement instruments, and Bedi et al. (2016) called for the development of valid and reliable measures. In response, Den Hartog and Belschak (2012) and Mihelic et al. (2010) developed and validated measurement tools for virtuous leadership. These tools, however, do not show the existence of a relationship between virtuous and ethical leadership.

In this study, I explored the degree of alignment and correlation between the measurement instruments used to assess virtuous and ethical leadership and the potential impact of discrepancies in research findings, supporting the recommendation by DeRue et al. (2011) to conduct a comparative analysis of leadership models to address limitations in the existing literature. Schaubroeck and Lam (2002) and Samnani et al. (2021) also emphasized the need for accurate measurement in the study of leadership and its impact on employee and organizational outcomes. The current study further contributes to understanding the relationship between ethical and virtuous leadership using quantitative methods. Den Hartog and Belschak (2012) suggested that virtuous leadership may enhance employees' moral identity and work engagement, and Taamneh et al. (2024) proposed that ethical leadership can enhance employees' perception of justice and commitment to the organization. Greenbaum et al. (2021) and Quade et al. (2020) implied that ethical and virtuous leadership could affect organizational culture and climate.

Through surveys of leaders in various industries, in this study, I explored how virtuous and ethical leadership practices, as perceived by subordinates and peers,

correlate with one another, thereby adding to the growing body of research on this topic. By addressing the gaps in the literature and using multiple sources of evidence, this study contributes significantly to understanding the relationship between virtuous and ethical leadership and the impact of measurement instruments on this relationship. Overall, the research findings provide valuable insight for organizational leaders, policymakers, and scholars seeking to promote ethical behavior and effective leadership practices in the workplace.

Research Questions and Hypotheses

Researchers have shown that ethical and virtuous leadership can positively affect employee well-being, retention, and organizational outcomes (Mo & Shi, 2017; Qing et al., 2020). Accurate measurement of these outcomes using valid and reliable measurement tools is needed. In this study, I explored the degree of alignment between two measurement instruments used to assess virtuous and ethical leadership, respectively, the correlation thereof, and their impact on research findings. Research has shown that surveys and interviews with leaders promote ethical behavior and effective leadership practices in the workplace (Banks et al., 2016; Den Hartog & Belschak, 2012; Ehrhart et al., 2019; Greenbaum et al., 2021; Li et al., 2021; Liu et al., 2023; Mihelic et al., 2010; Quade et al., 2020; Samnani & Singh, 2021; Schaubroeck & Lam, 2002; Taamneh et al., 2024). The research questions (RQs) addressed in this study are as follows:

RQ1: Is there a significant and positive correlation between the scores obtained from virtuous leadership measurement scales and ethical leadership measurement scales?

RQ2: Can the VLQ and ELS be used interchangeably without modification to measure outcomes in both virtuous and ethical leadership?

H1: There is a positive and significant correlation between the scores obtained from virtuous leadership measurement scales and ethical leadership measurement scales.

H2: The scores obtained from a virtuous leadership measurement scale can accurately predict the scores on an ethical leadership measurement scale, and vice versa.

Significance of the Study

Understanding the correlation between virtuous and ethical leadership and the correlation between their respective reliable and valid measurement scales remains an essential aspect of leadership studies (Brown & Treviño, 2014; Nielsen et al., 2020; Sarwar et al., 2020). Although researchers have created some measurement instruments, the lack of consensus in definition and measurement has led to inconsistent results (Cameron & Winn, 2012; Hannah et al., 2020). Recently, researchers have emphasized the need to explore the relationship between ethical and virtuous leadership and its potential impact on organizational outcomes (Shin & Kim, 2021; Zhang et al., 2019). A meta-analysis by Nielsen et al. (2020) also highlighted the need to understand this relationship, suggesting that numerous factors may moderate it. In this research, I addressed this need within leadership theory and practice, providing valuable insights for leaders, organizations, and researchers (see Korsgaard, 2020; Sarwar et al., 2020) and to guide the development of effective leadership practices in professional, academic, and governmental organizations worldwide (Brown & Treviño, 2014; Cameron & Winn, 2012). I also addressed these issues by critically analyzing the limitations in the existing literature via a literature review. Facilitating a comparative analysis of prior research allowed the identification of shared trends and patterns and addressing of the limitations and deficiencies of prior studies.

The outcome of this study will aid in determining the degree of association, correlation, and interchangeability between ethical and virtuous leadership by providing a novel and improved understanding of their relationship. I will disseminate the information to a greater population to use the results to overcome the existing limitations in the literature (see Cameron & Winn, 2012; Sarwar et al., 2020). In this way, I will expand the literature on each respective concept by validating the extent to which research can be applied and integrated across both domains (see Nielsen et al., 2020).

Theoretical Framework

In research aimed at understanding the correlation between virtuous and ethical leadership and their assessment instruments, a robust theoretical foundation is necessary. The theoretical basis not only contextualizes the study within the broader field of

leadership research but also dictates the methodological choices, including the selection and application of appropriate measurement instruments (Ravitch & Carl, 2016).

The theoretical framework informs the conceptualization of ethical and virtuous leadership, defining these constructs' core dimensions and influencing the development of research questions. For example, studies grounded in virtue ethics theory (Aristotle, 2000) might emphasize character and moral virtue in leadership, whereas those informed by the deontological theory (Kant, 1997) might focus on the role of rules, duties, and obligations. These theoretical perspectives not only guide the formulation of hypotheses about the relationship between virtuous and ethical leadership but also shape the operational definitions of these constructs, influencing the choice of measurement instruments (Brown et al., 2005; Cameron, 2021).

A conceptual framework guides methodological research decisions. For example, correlational research designs would require quantitative measures of ethical and virtuous leadership, such as the ELS (Brown et al., 2005) and the VLS (Sosik et al., 2012). The chosen theories could suggest modifications or additions to these scales, improving alignment with the theoretical constructs under investigation.

Last, the theoretical structure helps interpret the research findings, allowing researchers to relate their empirical observations to broader theoretical principles. For example, a significant correlation between virtuous and ethical leadership might be interpreted in light of theories emphasizing the interdependence of moral character and ethical conduct in leadership (Hackett & Wang, 2012). The theoretical underpinnings of this study included a comprehensive literature review exploring the definitions of virtuous and ethical leadership and their relationship with each other. I also examined the instruments used to assess these types of leadership and the levels of alignment between them. Sarwar et al. (2020) noted that because leadership measurement instruments can significantly influence research findings, it is essential to understand their alignment to ensure valid results.

Ethical Leadership

One of the key theories informing ethical leadership research is the social learning theory (Bandura, 1971). Bandura postulated that people learn by observing others' behaviors and the outcomes of those behaviors. In ethical leadership, this theory suggests

that leaders serve as role models whose ethical or unethical behavior can be imitated by followers (Brown et al., 2005). Hence, a leader demonstrating ethical behavior would encourage followers to emulate their behaviors.

The social exchange theory provides a framework for understanding the dynamics of leader–follower relationships in ethical leadership (Blau, 1964). According to this theory, interactions based on mutual trust, respect, and obligation lead to high-quality relationships. Ethical leaders foster these high-quality social exchanges through their fair and respectful treatment of followers, leading to increased job satisfaction, commitment, and performance among followers (Treviño et al., 2003).

Ethical decision-making theory can also be part of the theoretical framework, focusing on the process leaders undergo to make ethical decisions. The four-component model Rest (1986) proposed suggests that ethical decision-making involves moral sensitivity, judgment, motivation, and character. In this model, ethical leaders demonstrate an aptitude for all four components, effectively recognizing moral issues, making moral judgments, prioritizing moral values, and executing moral actions.

To summarize, a theoretical framework for research on ethical leadership includes social learning theory, social exchange theory, and ethical decision-making theory. This combined framework would allow for a comprehensive understanding of ethical leadership encompassing how ethical behavior is modeled and disseminated, the nature of interactions between leaders and followers, and the decision-making process leaders undertake to act ethically.

Ethical leadership can be measured using the ELS, a 10-item measurement tool assessing trustworthiness, fairness, and the ability to set an example regarding expected ethical behavior. The ELS allows employees to assess managerial and leadership techniques from a distinct perspective clarifying what is giving them motivation and inspiration and what is making the workplace a challenging space, as per Ferrell et al. (2019). According to Shakeel et al. (2019), researchers can use the ELS in ongoing evaluations to assure a given workplace that the leader has remained ethical in their practices and has not begun acting unethically or allowing changes in their personal worldview, which would negatively affect their leadership abilities.

Foundational leadership theory (FLT) functions as a theoretical framework to guide any assessments of ELS. Saha et al. (2019) suggested that FLT concerns a leadership process where leaders examine their personal perception of a situation or person and weigh that against an employee's perception. Proponents of FLT insist that the assessment be based on the leader and their team's adoption and display of assurance, integrity, and pragmatism (Saha et al., 2019). FLT was suitable for this study because it remains grounded in ethical leadership, as Fuller and Jones (2021) noted, and proposes that ethical leadership can change, evolve, and even increase or decrease in effectiveness over time as Fuller (2021) stated. FLT ultimately assumes that ethical leadership requires regular assessment rather than a static point-in-time measure.

According to Cooper (2018), researchers can use ethics of responsibility as part of the ELS and ethical leadership framework. Cooper defined the ethics of responsibility as the process by which a person accounts for the long-term results or consequences of their current actions, essentially taking responsibility for them. This ethical stance motivates leaders to act more ethically, providing a greater example for their employees. Ethics of responsibility also presupposes that the future of the firm or organization will be protected because the leader will assume responsibility and thus make ethical decisions to avoid needing to take the blame for negative impacts (Cooper, 2018).

The two frameworks suggested here are inherent in conducting ESL appropriately and in a timely manner. Although the ELS suggests regular assessments and even owes its success to such assessments, providing leaders with the guidance necessary is still needed to ensure they remain ethical and understand their duties and that they and their organization evolve. Another aspect of ethical leadership, guided by FLT, is the matter of ethics in a diverse environment (Fuller, 2021). Per FLT, leaders should assess the strengths of the group and not the tolerance or acceptance of an individual. As such, the use of FLT and the ELS helps ensure a safe space for all employees to feel validated and heard (Fuller & Jones, 2021) and could add to employee motivation and willingness to cooperate.

Virtuous Leadership

Virtuous leadership research is typically grounded in several interrelated theories providing a comprehensive lens through which to understand this leadership paradigm.

The virtue ethics theory, based on Aristotle (2000), is a primary theoretical underpinning. This theory emphasizes the importance of moral virtues, defined as character traits that are desirable for their own sake and for the sake of human flourishing (eudaimonia). In the context of virtuous leadership, these virtues, including wisdom, courage, temperance, and justice, guide leaders' behaviors and decision-making processes (Crossan et al., 2013).

Positive organizational scholarship (POS) is another foundational theory informing the study of virtuous leadership. POS focuses on the dynamics that lead to exceptional individual and organizational performance, underlining the role of virtuous behaviors in enhancing organizational resilience, innovation, and excellence (Cameron et al., 2003). From a POS perspective, virtuous leadership fosters positive deviance and cultivates an organizational culture characterized by positivity and virtue (Cameron et al., 2004). In this situation, *positive deviance* is defined as a sociobehavioral change methodology predicated on the premise that certain individuals within a community adopt atypical but effective behaviors or strategies, enabling them to overcome common challenges more successfully than peers without access to extra resources or knowledge (Sharma & Chillakuri, 2023). Servant leadership theory (SLT) also contributes to understanding virtuous leadership, emphasizing the leaders' commitment to serving others and prioritizing followers' needs over theirs (Greenleaf, 1977). In this light, virtuous leaders focus on developing their followers, fostering a sense of community, and practicing authenticity, humility, and stewardship (Sendjaya et al., 2019).

In summary, a theoretical framework for research into virtuous leadership includes virtuous ethics theory, POS, and SLT. This combination offers a multidimensional understanding of virtuous leadership encompassing the moral virtues that guide leaders, the positive impacts of virtuous behavior at the individual and organizational levels, and the service-oriented nature of virtuous leadership. According to Gonzalez-Padron et al. (2012), the VLQ allows the leader to focus on one trait that is considered virtuous in leaders, adapting current strengths to suit the situation and even improving weak points to further provide consistent leadership. Typically, the scale focuses on one trait at a time, addressing characteristics such as warmth, empathy, and compassion (Hendriks et al., 2020). Virtuous leadership requires the leader to act

voluntarily or otherwise be intrinsically motivated and intentional in their leadership behavior. This includes adopting characteristics such as courage, humanity, and justice and exhibiting them to all employees repeatedly and in a manner that engages them directly and equally (Hendriks et al., 2020). Essentially, virtuous leadership requires the individual to act virtuously, considering the personal perspectives and lives of employees before and during any changes in the workplace and recognizing workers as individuals with lives outside of the organization.

Similar to ethical leadership, virtuous leadership and its accompanying scale require a solid framework to guide them. Ethics of virtue, also known as virtue ethics, can be easily applied to virtuous leadership for several reasons. First, ethics of virtue requires individuals to orient themselves to the common good, according to Nassif et al. (2021), who argued that such a worldview further requires integrating utilitarianism into its framework. Utilitarianism is not consistently related to virtue ethics or virtuous leadership, but because of its orientation toward the greater good (i.e., making decisions that serve the majority against the minority), it would be plausible to assume that virtuous leaders would consider it (Nassif et al., 2021). Researchers have cautioned against adopting a consistent perspective wherein only the majority can be served because this may set a poor example in the workplace, increase tension, and deprive the organization of virtuous leadership (Hendriks et al., 2020).

This perspective is not the sole reason ethics of virtue is a relevant framework for virtuous leadership. Ethics of virtue also insists that the leader provides a platform for employee development (Ferrell et al., 2019) and places the leader in a position where they view employees as individuals with unique strengths and value. The virtuous leader is self-motivated to assess individuals, examining their talents and skills not only for the firm or organization but also for personal development (Hendriks et al., 2020). Employee trust and satisfaction are increased, as is employee confidence. Productivity has also been seen to increase with virtue ethics (Cooper, 2018).

The ethics of virtue is not the only applicable framework to virtuous leadership. Arguably, the ethics of virtue is not a strong enough framework to support such an effort. Transformational leadership frameworks also assist virtuous leadership. According to Hansen and Pihl-Thingvad (2018), transformational leadership is a process by which the

leader exchanges information and, in some cases, responsibility with their teams. Leadership theory suggests that leadership does not have to be about leading a team and may involve helping individuals build their leadership capabilities (Hansen & Pihl-Thingvad, 2018).

Virtuous leadership, ethics of virtue, and transformational leadership are intrinsically related and not mutually exclusive. These three aspects of leadership and business ethics can be used singularly or in combinations of two or even three, according to Tang (2019). Lasrado and Kassem (2021), for example, noted that transformational leadership and its accompanying theories are compatible with most leadership efforts seeking to improve a team or organization. Transforming teams into small groups of leaders, even if they cannot act in full capacity as traditional leaders, enhances confidence in their abilities and trust in their official leader (Hawkins, 2021). Employees working under these conditions are more likely to be successful and satisfied in their work (Prochazka et al., 2018).

Theoretical Framework Summary

The foundational frameworks discussed herein were pivotal in guiding the research on the correlation between virtuous and ethical leadership and the instruments used to measure these constructs. They shaped the research questions, informed the methodological choices, and aided in interpreting the research findings in light of existing theoretical perspectives.

Methodology

In this study, I investigated the correlation and interchangeability between virtuous and ethical leadership scales. I included a comprehensive literature review of the individual theories as well as their scales. Unfortunately, the scope of the available literature and the quality and accuracy of these studies (Cameron et al., 2003) limited the current study. I only focused on measurement instruments for virtuous and ethical leadership and did not investigate other factors that may affect leadership outcomes or other leadership styles. I addressed no causal relationship, and I included only articles in English in the literature review.

Research Design

The research design selected for this study was a correlation design that allows the examination the associations between two or more variables without manipulating the independent variable (Curtis et al., 2016). This design was appropriate for the current study to examine the association between virtuous leadership and ethical leadership based on two established measurement scales: the ELS (Brown et al., 2005) and the VLS (Sarros, Gray et al., 2006). Because I did not manipulate the independent variable, the correlation design did not allow establishing cause-and-effect relationships (Leedy & Ormrod, 2016). Instead, I explored the existing relationship between virtuous leadership and ethical leadership within a specific sample.

Population and Sampling

The target population for this study consisted of leaders, subordinates, and peers responsible for making direct reports and leading and influencing others in their respective contexts. These included executives, managers, and supervisors. All these individuals possessed decision-making authority and managerial responsibilities.

I conducted recruitment of participants meticulously, using purposive sampling techniques, professional network connections, and collaboration with organizations willing to participate in the study. Using a professional survey company enabled a refined and targeted approach to reaching individuals who met the study's selection criteria. Leveraging the expertise of a survey company ensured a structured process in contacting potential participants and providing them with a comprehensive explanation of the study's purpose and significance. Each individual chose to participate in the study, upholding ethical standards throughout the research.

Sampling. I employed a purposive sampling technique to select a representative population. Purposive sampling allows the selection of participants with specific characteristics relevant to the research objectives (Creswell & Creswell, 2023); this approach was inherent to this study. Purposive sampling allowed me to avoid recruiting inappropriate participants. For example, an individual in a temporary leadership position will not have the authority or time to implement either the ELS or the VLQ. I drew the sample from different industries and organizations to ensure a comprehensive representation of virtuous and ethical leadership practices. Simple random sampling was

relevant to the study because the sampling frame was neither subdivided nor partitioned; thus, the sample was unbiased and inferences could be generalized, as Creswell and Creswell (2023) explained. Saturation determines the sample size, where data are collected and analyzed regularly until no added information emerges or theoretical saturation is achieved (Guest et al., 2006). In this study, data collection and analysis continued until saturation.

Inclusion and Exclusion Criteria

Inclusion factors were individuals with leadership positions in their respective organizations who had direct reports, were responsible for leading and influencing others, and possessed decision-making authority and managerial responsibilities. Exclusion factors were those who did not hold leadership positions or have direct reports or leadership responsibilities and who were unable or unwilling to provide informed consent.

Data Analysis

I analyzed the sample data collected in this study using the Statistical Package for the Social Sciences (SPSS) software version 28 (IBM Corp, 2021). The analysis involved the generation of multivariate tables and frequency distributions. I assessed descriptive measurement statistics such as mean, mode, median, variance, and standard deviation for thematic or patterned characteristics of the sample and for each scale (Babbie, 2013; Salkind & Frey, 2020). I used these statistics to summarize the scores obtained from each scale, providing an overview of leaders' levels of virtuous and ethical leadership. Descriptive statistics helped show the data's central tendency, variability, and distribution.

I also conducted a correlation analysis to examine the relationship between virtuous leadership and ethical leadership based on the scores obtained from the two measurement scales. For correlation analysis, I employed Pearson's correlation coefficient to assess the strength and direction of the relationship, as Pallant (2021) explained. I set the significance level at $p < .05$ to determine the statistical significance of the correlation coefficients.

Per Field (2018), the magnitude and statistical significance of the correlations guided my interpretations. I assessed the magnitude based on Cohen's (1988) proposed

guidelines, where correlations below 0.30 are considered minimal, those between 0.30 and .50 are moderate, and those above 0.50 are strong. My analysis also involved examining the direction of the correlation to determine whether virtuous and ethical leadership were positively or negatively related.

Instrumentation and Scales

I used measurement scales ELS and VLQ to assess virtuous and ethical leadership. These scales have been widely used in the literature, and they have demonstrated strong psychometric properties including their reliability and validity. The use of established measurement scales helps ensure the standardized assessment of virtuous leadership, ethical leadership, and the combined ethical and virtuous leadership constructs. Participants are required to respond to the items on each scale using a Likert scale ranging from 1 = *strongly disagree* to 5 = *strongly agree*. I applied these scales in a randomized order to minimize potential order effects.

The ELS

I used the ELS (Brown et al., 2005) to measure the levels of ethical leadership. This scale assesses leaders' ethical behaviors, such as setting ethical standards, promoting ethical decision-making, and fostering an ethical climate within the organization. The scale has demonstrated strong psychometric properties, including internal consistency reliability and convergent and discriminant validity (Brown et al., 2005; Mayer et al., 2012). This scale is also replicable, making it ideal for repeated use.

The VLQ

I employed the VLQ (Wang & Hackett, 2016) to measure the levels of virtuous leadership. The VLQ is a tool developed to assess and promote virtuous leadership in organizations. This concept of virtuous leadership is deeply rooted in the philosophical traditions of virtue ethics, particularly those of Confucianism and Aristotelianism, as Hendriks et al. (2020) noted. These philosophical frameworks involve a set of virtues that are both coherent and parsimonious (i.e., virtues universally recognized as good and are efficiently applicable in various contexts).

The VLQ is designed to operationalize virtuous leadership by providing a set of questions or scenarios where the leadership's virtues are tested or exemplified. The questionnaire has undergone validation processes and has been reported to demonstrate

satisfactory measurement properties, meaning it effectively captures the essence and practical implementation of virtuous leadership (Yang, 2021). The VLQ uses a 30-item measure to assess the extent to which individuals perceive their supervisors or managers as embodying virtuous leadership qualities. Each item on the questionnaire is responded to using a 5-point Likert-type scale, which ranges from 1 = *strongly disagree* to 5 = *strongly agree*. This scale allows respondents to indicate the degree to which they agree or disagree with each statement about their supervisor's behaviors and attributes (Wang & Hackett, 2016).

Missing Data

Missing data are common in most research endeavors. The data may go missing because, for example, a participant does not provide a response, or the response is incomplete. Appropriate addressing missing data is important to ensure the validity and reliability of the findings, avoiding bias or inconclusive results (Little & Rubin, 2019). To prepare for the potential of missing data, I employed multiple imputation techniques based on observed data patterns (see Graham, 2012; Schafer & Graham, 2002). This technique helped preserve the sample size, maintain the variability of the data, and avoid biases associated with complete case analysis or ad hoc imputation methods. I conducted the multiple imputation process using SPSS to input missing values based on the available data.

After inputting the missing data, I analyzed the revised data sets alongside the complete cases. I then performed statistical analyses on each imputed data set separately, including the correlation analysis mentioned previously. The next step entailed combining the results using appropriate methods, such as Rubin's rules, to obtain pooled estimates that account for the uncertainty of the imputed values (Little & Rubin, 2019; Schafer, 1999). I then conducted sensitivity analyses to assess the robustness of the results by comparing the findings obtained from the imputed data sets with those obtained from the complete cases only. These analyses assisted in evaluating the potential impact of missing data on the overall conclusions, strengthening the study's validity (Graham, 2012).

Scope and Limitations

Recent research on ethical and virtuous leadership has emphasized the importance of accurately measuring these constructs (Den Hartog & Belschak, 2012; Nielsen et al., 2020). Researchers have developed several measurement scales to assess ethical leadership, including the ELS and the multifactor leadership questionnaire (Brown & Treviño, 2014; Resick et al., 2013). Similarly, the VLS and the VLQ have been developed to assess virtuous leadership (Hannah et al., 2020; Wang & Hackett, 2016). Researchers have highlighted the potential impact of discrepancies in measurement on research findings (Greenbaum et al., 2021), indicating the importance of measurement alignment (Banks et al., 2016). As such, I explored the degree of alignment between measurement instruments used to assess virtuous and ethical leadership.

It is essential to acknowledge the limitations of data analysis. First, the study's cross-sectional design limited my ability to establish causality or infer temporal relationships between virtuous and ethical leadership. Longitudinal studies would provide a stronger and more salient understanding of the directionality of the relationship.

Second, the study relied on self-reporting measures that may introduce a common method and social desirability biases (Podsakoff et al., 2003; Yang, 2021). Although the use of a data collection service provided a large measure of anonymity and confidentiality, participants might have still provided responses that aligned with their social norms or perceived expectations, which may suggest some element of their identity. Third, the control variables included in this study may not have captured all the contradictory factors influencing the relationship between virtuous and ethical leadership. Other variables, such as organizational climate, individual values, or contextual factors also played a role. Finally, the study's reliance on the selected measurement scales assumes the validity and reliability of these instruments because of the scales' having been widely used and demonstrating satisfactory psychometric properties (Sarros, Tanewski et al., 2006; Zhang et al., 2019). Alternative measures or additional validation studies could further enhance the rigor of the research.

Although this study may have been limited by the quality and accuracy of existing studies, it provided valuable insights into promoting ethical behavior and effective leadership practices in the workplace (see Den Hartog & Belschak, 2012; Nielsen et al.,

2020). The study can significantly contribute to understanding the relationship between virtuous and ethical leadership and the impact of measurement instruments on this relationship, ultimately improving leadership practices and increasing workplace safety, satisfaction, and cooperation (Cameron et al., 2003; Walumbwa et al., 2008).

Definition of Terms

Ethical Leadership. Ethical leadership is a leadership style that emphasizes the importance of ethical principles and values in decision-making and behavior. Ethical leadership includes moral qualities and managerial practices, aligning with established norms and encouraging followers to adopt ethical behavior through communication, reinforcement, and decision-making (Brown & Treviño, 2014; Kalshoven et al., 2011).

ELS. The ELS is a reliable and extensively tested measurement scale designed to evaluate the effectiveness of ethical leadership in measuring the alignment of behavior with established ethical norms. Brown et al. (2005) developed the ELS, and researchers have subjected it to significant study.

Leadership Virtues Questionnaire (LVQ). The LVQ is a measurement initiative Riggio et al. (2010) proposed that aligns more closely with the virtuous leadership framework. The LVQ consists of 19 items and is rated by subordinates with the aid of the literature on virtue ethics. The measurement tool findings further suggest that a virtuous leader demonstrates the qualities of prudence, courage, self-control, and fairness.

Organizational Outcomes. In this study, organizational outcomes are the results or consequences of an organization's actions or decisions. Organizational outcomes can be positive or negative and may be related to financial performance, employee satisfaction, customer loyalty, or other factors (Judge et al., 2001; Wang & Hackett, 2021).

Virtuous Leadership. Virtuous leadership is a leadership style focused on promoting moral behavior and maximizing the potential of human systems by demonstrating positive character traits such as honesty, humility, empathy, prudence, courage, self-control, and fairness. Virtuous leadership is founded on principles that align with the recommended framework for virtuous leadership (Cameron & Spreitzer, 2012; Lilius et al., 2011).

VLQ. The VLQ (Wang & Hackett, 2016) serves as an evaluative tool aimed at identifying and fostering virtuous leadership in organizational settings. This

questionnaire's foundation is on the philosophical underpinnings of virtue ethics significantly influenced by the Confucian and Aristotelian traditions. These traditions emphasize a collection of virtues seen as both coherent, meaning they work well together and make sense within a broader ethical framework, and parsimonious, implying they are simple yet comprehensive enough to cover essential moral grounds.

VLS. The VLS is a recently developed measurement instrument that aligns more closely with the virtuous leadership framework.

Summary

In this chapter, I introduced and explored the relationship between virtuous and ethical leadership using the ELS and VLS measurement tools. Previous research has widely used and validated these measurement scales. In this study, I used ELS and VLS to assess the levels of virtuous and ethical leadership. In leadership research, these scales have demonstrated strong psychometric properties and have seen wide use.

In the present study, I employed a correlation research design, which allows the investigation of the relationships between two or more variables (Curtis et al., 2016), to examine the association between virtuous and ethical leadership, . However, it is important to emphasize that correlation does not establish causality (Leedy & Ormrod, 2016). The population for this study comprised individuals primarily in development and construction roles who held leadership positions and had direct reports. I used purposive sampling to select participants meeting the inclusion criteria, ensuring a representative sample (Creswell & Creswell, 2023). I determined the sample size through iterative data collection and analysis until reaching theoretical saturation (Guest et al., 2006).

Data analysis involved descriptive statistics to summarize the scores I obtained from each scale and correlation analysis to examine the relationship between virtuous and ethical leadership. I set the significance level at $p < .05$ to determine the statistical significance of the correlations. In the interpretation of the results, I considered the magnitude and direction of the correlations (Cohen, 1988; Field, 2018). I recognized in this chapter that certain limitations exist within the study, including the study's cross-sectional design, reliance on self-reporting measures, and potential sample bias. However, despite these limitations, the study has contributed to understanding virtuous and ethical leadership and its implications for leadership practices.

Chapter 2: Literature Review

Ethical and virtuous leadership is an emerging paradigm that has gained increasing attention within the leadership literature with a focus on leaders' ability to foster positive organizational climates and drive sustained performance (Brown & Mitchell, 2010; Crossan et al., 2013; Wen et al., 2021). Both leadership models focus on promoting a culture of integrity, trust, and moral excellence within organizations. Ethical leadership emphasizes conduct respecting others, whereas virtuous leadership centers on leaders' character strengths (Jin et al., 2022; Martin et al., 2019). Ethical leadership involves the demonstration of appropriate conduct through personal actions and interpersonal relationships and the promotion of such conduct to followers through communication, reinforcement, and decision-making (Afsar et al., 2020; Brown et al., 2005). Virtuous leadership emphasizes the demonstration of virtues such as wisdom, courage, humanity, justice, temperance, and transcendence (AlHalaseh & Alrawadyeh, 2020; Cameron, 2021; C. Peterson & Seligman, 2004). The operationalization and measurement of these constructs have been advanced through the development of the ELS by Brown et al. (2005) and VSL by Sosik et al. (2012). This literature review includes an overview of the studies conducted on ethical and virtuous leadership with a specific focus on these measurement scales and their applications, implications, and future directions.

Ethical Leadership

The concept of *ethical leadership*, defined as "the demonstration of normatively appropriate conduct through personal actions and interpersonal relationships, and the promotion of such conduct to followers through two-way communication, reinforcement, and decision the way communication, reinforcement, and decision-making" (Brown et al., 2005, p. 120), has received considerable attention in the literature. The literature review presented in this section encompasses a comprehensive examination of the Socratic and Aristotelian dialogues on ethical leadership, their implications on various organizational outcomes, the processes through which they operate, and the challenges this area of research currently faces in addition to suggesting potential future research directions.

Conceptualization of Ethical Leadership

Researchers have studied ethical leadership through several perspectives with a wide variety of definitions proposed in the scholarly literature. Ethical leadership is grounded in behaviors and decisions aligned with ethical principles, advocating both individual and collective rights (Yukl et al., 2017; Pless & Maak, 2006; Weaver et al., 2012). Brown et al. (2005) defined ethical leadership as the display of normatively appropriate conduct, which is demonstrated through personal actions and interpersonal relationships, as well as, more important, the promotion of such conduct in followers through a two-way communication, reinforcement, and decision-making.

Expanding on this, Mayer et al. (2012), Mango (2018), and Kalyar et al. (2020) suggested ethical leaders model appropriate behavior, promote fairness, and actively manage morality in their organizations. They underscored that the leader's role is that of a moral manager who uses their authority and influence to set the moral tone within their organizations. In their seminal work, Treviño et al. (2003) suggested ethical leaders are both moral persons and moral managers. As moral persons, they display attributes such as honesty, trustworthiness, and principled judgment whereas as moral managers, they actively strive to cultivate an ethical climate in the organization. Adding a different perspective, Ciulla et al. (2006) debated the inherent moral component in the concept of leadership, suggesting that any effective leadership should be intrinsically ethical, and that leadership and ethics cannot be separated.

Impact on Organizational Outcomes

The findings regarding the impact of ethical leadership on organizational outcomes emphasized its role in fostering trust among employees in the organization and enhancing service recovery performance. Ethical leadership, because of its moral grounding and emphasis on fairness, integrity, and respect, helps build a strong foundation of trust. Employees who trust their organization and its leaders are more likely to be committed to their work, exhibit high levels of performance, particularly in service recovery scenarios, and display a greater willingness to transcend their roles (Eluwole et al., 2022). For example, Moore et al. (2019) found that ethical leadership is positively correlated with job satisfaction, organizational commitment, and employee performance. Bedi et al. (2016) conducted a comprehensive meta-analysis and concluded that ethical

leadership is positively associated with employee satisfaction with employment, dedication to the organization, and job efficacy and negatively correlated with deviance and turnover intention.

Similarly, Neubert et al. (2009) found that ethical leadership is associated with low levels of workplace deviance. The researchers suggested that ethical leaders can create an ethical climate that discourages employees from engaging in harmful behaviors. Wen et al. (2021) later confirmed these findings, showing that ethical leadership significantly boosts employees' innovative and creative behavior and perception of interactional justice. It also acts as a regulatory force, modulating the impact of interactional justice on employees' willingness to innovate. Essentially, ethical leaders not only foster a fair and creative work environment but also enhance the positive relationship between fair treatment and innovative activity among employees.

Zhu et al. (2019) shed light on the profound influence ethical leadership has within organizations. Their findings revealed that ethical leadership affects employee performance directly shaping how employees view their work environment. This altered perception, in turn, positively influences their engagement with their job and overall job satisfaction. Essentially, when leaders behave ethically, it creates a ripple effect throughout the organization, enhancing various aspects of employee experience and performance.

Zhu et al. (2019) indicated that ethical leadership is about both preventing unethical behavior or ensuring compliance and fostering a positive, supportive environment that motivates employees. When employees perceive their leaders as being ethical, they are more likely to feel respected, valued, and understood, leading to higher levels of commitment, motivation, and satisfaction. Further extending the understanding of ethical leadership's impact, Tu et al. (2019) explored its effect on creativity and problem-solving within teams. Their findings suggested ethical leadership not only improves individual employee outcomes but also enhances collective capabilities. Specifically, when leaders are ethical, teams are more likely to engage in creative thinking and effective problem-solving, which might be because ethical leadership fosters an environment of trust, open communication, and psychological safety, which are conducive to innovative thinking and collaborative problem-solving.

Mechanisms of Ethical Leadership

Most studies on the impact of ethical leadership focused on the mechanisms through which ethical leadership influences organizational outcomes at least to some degree. Den Hartog and Belschak (2012) proposed that ethical leadership creates psychological safety, a climate where employees feel comfortable taking risks, innovating, and learning from their mistakes. Benevene et al. (2020) further discussed this mechanism of influence in which ethical leadership was seen as an antecedent to job satisfaction and employee performance.

Piccolo et al. (2010) and Liu et al. (2023) found that ethical leadership enhances employees' psychological empowerment by promoting fairness and modeling ethical behavior. This in turn leads to increased job satisfaction and productivity. Mo and Shi (2017) suggested that ethical leadership positively influences followers' ethical behavior by modeling ethics and nurturing an ethical environment, promoting a culture of doing the right thing.

Challenges and Future Directions

Despite progress in the study of ethical leadership, several challenges persist. Consensus regarding the definition and measurement of ethical leadership is lacking, as Yukl et al. (2013) highlighted. Further research is needed to develop more comprehensive and integrative models of ethical leadership. The role of context in ethical leadership is also not fully understood. As Treviño et al. (2014) and Ahmad et al. (2023) highlighted, the context including different cultures, industries, and organizational structures can influence the manifestation and effectiveness of ethical leadership.

Conclusion

Ethical leadership has been instrumental not only in illuminating the role of ethics in the actions of a respective leader or manager but also in creating a culture of transparency and honesty in organizations. Despite these challenges, its potential to contribute to and further enhance organizational performance and employee well-being is undeniable. Future research is warranted to address the current gaps and further the understanding of ethical leadership.

The Ethical Leadership Scale

The ELS assesses ethical leadership within organizations. In this section, I present an overview of its development, its application in organizational studies, empirical findings associated with it, and potential future research directions.

Development and Structure of the Ethical Leadership Scale

Brown et al. (2005) developed the ELS to provide a reliable and valid measure of ethical leadership. They based it on a series of interviews and surveys with employees about their leaders. The ELS consists of 10 items measuring various aspects of ethical leadership such as fairness, power sharing, role clarification, concern for people, and ethical guidance. Participants are required to rate their agreement with each item on a 5-point Likert-type scale. As Brown et al. (2005) argued, this scale captures the moral veritableness that ethical leadership represents a combination of "moral person" and "moral manager" dimensions. A leader's reputation as a "moral person" reflects their honesty, integrity, and trustworthiness. The "moral manager" aspect reflects the leader's role in conveying ethical standards, rewarding ethical conduct, and holding employees accountable for their behavior.

Application of the Ethical Leadership Scale

Liu et al. (2023) conducted reliability and validity tests for their research using the ELS. They found that Cronbach's alpha coefficients, a measure of internal consistency or reliability, ranged from 0.858 to 0.928 for all variables. This range is considerably higher than the commonly recommended value of 0.70, indicating good reliability for the research variables. In terms of validity, which assesses how well the test measures what it is supposed to measure, the average variance extracted for each variable was above the threshold of 0.5, and the composite reliability was greater than 0.6. These figures surpass the recommended thresholds, indicating the constructs were valid and that the scale used appropriately measured the intended variables (Liu et al., 2023).

The ELS has been widely used in organization studies, demonstrating its reliability and validity across different cultural contexts (Resick et al., 2013). Resick et al. found that the ELS performed well across multiple countries, including the United States, China, Germany, India, and Spain. Studies examining the relationship between ethical leadership and various organizational outcomes have used the ELS. Mayer et al. (2012)

used the ELS to investigate the relationship between ethical leadership and follower job satisfaction, organizational commitment, and job performance. They found that ethical leadership, as measured using the ELS, was positively related to these factors.

Empirical Findings Associated With the Ethical Leadership Scale

A significant body of research has demonstrated that the ELS is associated with various positive organizational outcomes (Anser et al., 2021). Walumbwa and Schaubroeck (2009) found that ethical leadership as measured using the ELS was negatively related to employee turnover intentions and positively related to job satisfaction, organizational commitment, and employee engagement. Demirtas et al. (2015) also found that ethical leadership, as measured using the ELS, was positively related to employee trust and negatively related to workplace deviance. These findings provide further empirical support for the validity of the ELS as a measure of ethical leadership.

Ethical Leadership and Organizational Outcomes

The ELS has been employed in numerous studies to examine the relationship between ethical leadership and various organizational outcomes. Hassan et al. (2022) used the ELS to examine the relationship between ethical leadership and leader effectiveness. Their findings suggested that ethical leadership is positively associated with leader effectiveness. This positive association further suggested that subordinates perceive leaders who exhibit ethical behavior as being more effective. Cheng et al. (2015) applied the ELS to investigate the association between ethical leadership and employee voice behavior. They reported a positive relationship between ethical leadership and employee voice behavior, indicating that employees are more likely to speak up in organizations with ethical leaders.

Ethical Leadership and Employee Outcomes

The literature indicates that ethical leadership has a significant and wide-ranging impact on various aspects of employee attitudes and behaviors (Liu et al., 2023; Wadei et al., 2021). Researchers have effectively linked ethical leadership to outcomes such as job satisfaction, organizational commitment, ethical behavior, knowledge hiding and sharing, psychological well-being, and organizational environmental citizenship behaviors (Anser et al., 2021). As a result, ethical leadership has been suggested as crucial not only for

maintaining a morally sound work environment but also for enhancing overall organizational effectiveness and employee morale (Ahmad et al., 2023; Anser et al., 2021; Benevene et al., 2020; Qing et al., 2020).

Several researchers have used the ELS to explore the impact of ethical leadership on employee outcomes (Yang, 2021). Al Halbusi et al. (2018) examined the effect of ethical leadership on organizational justice perceptions and found that employees who perceive their leaders as being ethical tend to perceive higher levels of fairness in their organization. Demirtas et al. (2015) investigated the relationship between ethical leadership and turnover intention. Their research illustrated a measurable ratio of ethical leadership to turnover intention and revealed a negative relationship between ethical leadership and turnover intention, suggesting that ethical leadership might reduce employees' intention to leave the organization.

Ethical Leadership and Organizational Culture

The ELS and ethical leadership have also been positively linked to organizational culture (Wadei et al., 2021). Ethical leaders' behaviors foster a work environment where followers feel respected and trusted, empowering them to identify organizational problems, devise solutions, and generate new and useful ideas. This sense of respect and trust is crucial in encouraging employees to take the initiative and engage in innovative thinking, contributing positively to the organization's growth and adaptability (Wadei et al., 2021). Sarros et al. (2008) used the ELS in their study to examine the role of ethical leadership in fostering a culture of innovation and found a positive relationship between ethical leadership and an innovation-oriented culture, suggesting that ethical leaders might foster an environment conducive to innovation.

Conclusion

Despite the widespread use of and empirical support for the ELS, several research questions remain. For example, how does the ELS perform in different cultural contexts? Although Resick et al. (2013) found that the ELS performed well across several countries, additional research is needed to understand how it performs in other cultural contexts.

In conclusion, the ELS is a well-established and empirically supported measure of ethical leadership that focuses on the dimensions of ethical leadership. These dimensions

collectively contribute to the practice and evaluation of ethical leadership, focusing on behaviors and practices that promote fairness, accountability, and ethical conduct in organizations. Researchers should continue to explore its utility in different contexts and its relationship with other organizational outcomes.

Virtuous Leadership

Virtuous leadership, an emerging field in leadership studies, underscores the significance of character and virtue in effective leadership (Sosik & Cameron, 2010). In this literature review, my aim was to survey and analyze the existing research on this subject, focusing on the conceptualization of virtuous leadership. I also aimed to assess its impact on organizational outcomes, mechanisms by which it operates, and existing challenges and potential future directions.

Conceptualizing Virtuous Leadership

The term "virtue" originated from the Greek word "arête," which signifies excellence achieved by meeting morally right standards (Wang & Hackett, 2016). To provide a structured and clear understanding of virtue, Newstead et al. (2019) used the ontology of virtue, aiming to develop a more unified conceptualization of virtue, virtues, and virtuousness. They defined virtue as a human inclination to feel, think, and act in ways that express moral excellence and contribute to the common good. This definition encapsulates the essence of virtue as not only a set of ethical standards but also an inherent tendency toward morally excellent behavior that benefits society as a whole.

The theory of virtuous leadership is based on the premise that effective leaders manifest virtues in their leadership practices. These virtues include but are not limited to honesty, humility, courage, perseverance, wisdom, justice, and transcendence (Sarros, Gray et al., 2006). Virtuous leaders are those who lead by example, practice what they preach, and inspire their followers to do the same, which then trickles down to all employees in the organization (Yang, 2021).

Virtuous Leadership and Organizational Performance

A significant body of research has focused on the relationship between virtuous leadership and organizational performance. Pearce and Sims (2002) and Lemoine et al. (2019) found that virtuous leadership is positively associated with team effectiveness and organizational performance. This research revealed the virtues leaders embody, such as

honesty and humility, to foster a climate of trust and cooperation, leading to enhanced team performance.

Virtuous, Transformational, and Servant Leadership

The theory of virtuous leadership bears not only similarities to ethical, transformational, and servant leadership theories but also distinct differences. Transformational leadership focuses on instigating change and growth in followers, whereas servant leadership emphasizes serving followers' needs (Sendjaya et al., 2019; Yang, 2021). Although these leadership theories overlap in their emphasis on followers, they differ in their emphasis on moral excellence and character development in leaders.

Impact on Organizational Outcomes

Many researchers have indicated that virtuous leadership can lead to beneficial organizational outcomes (Wang & Hackett, 2022). Rego et al. (2017) found a positive correlation between virtuous leadership and employee well-being, job satisfaction, and job performance, indicating that virtues can play a crucial role in optimizing organizational outcomes. S. J. Peterson et al. (2009) also observed that virtuous leadership predicted job satisfaction, organizational commitment, and reduced turnover intentions among followers. Their findings suggested that virtuous leadership creates an enabling environment that encourages employees to excel.

Mechanisms of Virtuous Leadership

Although the research in this review is from different researchers, the wording and findings bear a striking similarity to the mechanisms of ethical leadership above. Yang (2021) discussed the striking similarities between the two while noting that the primary difference is in the leader and follower motivations rather than the outcomes. C. Peterson and Seligman (2004) marked a significant contribution to the field of positive psychology and virtue ethics by proposing a set of six universal virtues. After conducting a comprehensive survey of ancient texts across various major world cultures and religions, including Confucianism, Buddhism, Hinduism, ancient Greek religion, Judeo–Christianity, and Islam, they identified the following six core virtues that appear to transcend cultural and historical context:

- Courage: The emotional strengths that involve the exercise of will to accomplish goals in the face of opposition, external or internal.

- Humanity: Interpersonal strengths that involve tending to and befriending others.

- Justice: Civic strengths that underlie healthy community life.

- Temperance: Strengths that protect against excess.

- Transcendence: Strengths that forge connections to the larger universe and provide meaning.

- Wisdom: Cognitive strengths that entail the acquisition and use of knowledge.

These virtues are considered fundamental and widely valued across cultures, and they provide a framework for understanding character strengths and virtues in a broad, humanistic sense (C. Peterson & Seligman, 2004). Although C. Peterson and Seligman's work has been influential in various fields, including psychology, leadership, and organizational behavior, helping guide research and practice in fostering positive human development and ethical cultures within various types of communities and organizations, it is noted here because these six virtues form the basis of the VLQ (Wang & Hackett, 2016; Yang, 2021).

Several studies have addressed the mechanisms through which virtuous leadership influences organizational outcomes. Nembhard and Edmondson (2006) proposed that virtuous leadership can foster a psychologically safe environment that encourages employees to take risks, innovate, and learn from their mistakes without fear of retribution. Avey et al. (2011) found that virtuous leadership influences organizational outcomes by promoting positive psychological capital—consisting of hope, efficacy, resilience, and optimism—among employees. This psychological capital can act as a buffer against workplace stressors and burnout, leading to enhanced employee performance and well-being.

Challenges and Future Directions

Despite the growing interest in virtuous leadership, several challenges persist. The lack of consensus on the definition and measurement of virtuous leadership is a prominent issue (Ahmad et al., 2023; Crossan et al., 2013). Future research should focus on developing a comprehensive conceptualization and operationalization of virtuous leadership. Understand how contextual factors such as organizational culture and structure influence the effectiveness of virtuous leadership is also necessary (Hartnell et

al., 2011; Yang, 2021). Researchers could also explore the relationship between virtuous leadership and other leadership styles such as transformational and transactional leadership to provide a more nuanced understanding of this phenomenon (Bass & Riggio, 2005).

Conclusion

The study of virtuous leadership has provided valuable insights into the pivotal role of virtues in leadership and its impact on organizational outcomes. Although a consensus has not yet been reached on its conceptualization and operationalization, the potential of virtuous leadership in enhancing organizational performance and employee well-being is undeniable. As such, continuous exploration and research in this field are warranted.

The Virtuous Leadership Questionnaire

The VLQ revolves around the understanding that leadership is not only about skills and strategies but is also deeply rooted in the moral virtues of the leader, which, in turn, influence and inspire followers. This perspective is heavily influenced by virtue ethics, reflecting principles from both Confucian and Aristotelian thought. The core idea is that the leader's demonstration of virtues in appropriate situations not only signifies their virtuousness but also triggers admiration and emulation among followers. These virtues are part of what constitutes the "good" component of a leader's character and are integral to moral and ethical leadership. This understanding of leadership emphasizes the importance of moral virtues, such as integrity, courage, and empathy, as essential elements of effective and inspiring leadership. This review includes a comprehensive analysis of this development and its employment in empirical studies, related findings, and potential directions for future research.

Development and Structure of the Virtuous Leadership Questionnaire

Leaders who embody virtue create a unique dynamic where their followers adopt similar virtuous behaviors for intrinsic reasons rather than out of obligation or necessity (Wang & Hackett, 2016, 2020, 2022). This phenomenon is rooted in the genuine admiration and respect followers have for their leaders' virtuous qualities, leading them to internalize these virtues as part of their moral identity (Wang & Hackett, 2020). Consequently, the measurement of leadership effectiveness varies significantly across

leadership styles reflecting the distinct nature of leader–follower interactions unique to each style. This implies that understanding and assessing the leadership impact requires a nuanced approach that considers the specific attributes and outcomes associated with each leadership type (Nassif et al., 2021).

Application of the Virtuous Leadership Questionnaire

The VLQ has been applied in many ways in the leadership research landscape. It has demonstrated commendable reliability and validity across organizational contexts (Adewale, 2020; Hendriks et al., 2020). Research involving virtuous leadership or the VLQ often connects virtuous leadership with organizational outcomes. For example, Hemingway and Maclagan (2004) studied the impact of virtuous leadership on the organizational ethical climate. They concluded that higher levels of virtuous leadership often resulted in a more robust ethical climate in organizations. AlHalaseh and Alrawadyeh (2020) used the VLQ to examine the relationship between virtuous leadership and organizational excellence, finding a positive correlation between these variables. Ruiz-Palomino et al. (2023) employed the VLQ to explore the influence of virtuous leadership on teams' innovation performance. Their results showed that teams led by virtuous leaders were more likely to exhibit innovative behavior.

Another application is in examining the relationship between virtuous leadership and employee job satisfaction. Sarros et al. (2014) found that virtuous leadership was positively related to job satisfaction and organizational commitment. The researchers suggested that the virtues incorporated into the VLQ significantly influence employees' perceptions of their work environment and attachment to their organizations.

Empirical Findings Associated With the Virtuous Leadership Questionnaire

A growing body of research has supported the validity of VLQ and its association with various positive organizational outcomes. For example, Nassif et al. (2021) found that virtuous leadership, as measured using the VLQ, was positively related to organizational commitment and negatively related to turnover intentions. Similarly, Yang (2021) conducted a study linking virtuous leadership with organizational performance. The findings of both of these studies suggested that virtuous leadership promotes a positive organizational climate, leading to enhanced performance and employee well-being.

Many studies have indicated the reliability of the VLQ and its positive association with organizational outcomes (Wang & Hackett, 2022; Yang, 2021). Hendriks et al. (2020) showed that virtuous leadership, as measured using the VLQ, was positively correlated with employee job satisfaction, organizational commitment, and lower turnover intentions. Pearce and Sims (2002) confirmed that virtuous leadership positively influences team performance.

Virtuous Leadership and Organizational Outcomes

Several authors have employed the VLQ to investigate the relationship between virtuous leadership and various organizational outcomes. For example, Hendriks et al. (2020) employed the VLQ to examine the impact of virtuous leadership on the organizational ethical climate. Their findings suggested that high levels of virtuous leadership often result in a more robust ethical climate in organizations.

Virtuous Leadership and Team Performance

Lemoine et al. (2019) applied the VLQ in a study to explore the relationship between virtuous leadership and team performance. Their findings demonstrated that virtuous leadership is positively associated with team performance. They further suggested that virtues such as empathy, moral integrity, courage, and humility contribute to a leader's effectiveness in facilitating teamwork and collaboration.

Virtuous Leadership and Employee Turnover

Grimani and Gotsis (2020) showed that virtuous leadership correlates positively with employee job satisfaction and organizational commitment and negatively with turnover intentions. This finding suggests that leaders who display the virtues embodied in the VLQ create a work environment where employees feel satisfied, committed, and less likely to leave the organization.

Virtuous Leadership and Employee Well-Being

Ozkan and Ardic (2022) and Hendriks et al. (2020) examined the relationship between virtuous leadership and employee well-being. They found that virtuous leadership positively influences employee well-being. These findings suggest that leaders who exhibit virtues such as empathy, moral integrity, courage, and humility contribute to a work environment where employees feel psychologically and emotionally healthy.

Conclusion

Regardless of the successes of the VLQ, several research opportunities lie ahead. A notable topic for future exploration is the influence of cultural context on virtuous leadership. Although the VLQ reflects virtues recognized in Western societies, the interpretation and application of these virtues may differ in other cultural contexts (Adewale, 2020; Cheng et al., 2015; Chuang et al., 2016; Yang, 2021). The relationship between virtuous leadership and other leadership styles, such as transformational and servant leadership, remains largely unexplored (Nassif et al., 2021; Yukl et al., 2013). Future research could yield valuable insights into how these leadership styles interrelate and their combined effects on organizational outcomes.

In sum, the VLQ is a promising tool for assessing virtuous leadership. Initial studies have provided support for its validity and utility. Further research is, however, needed to fully understand its potential in advancing the field of leadership studies across a wider spectrum.

Summary

In this literature review, I focused on three key aspects of leadership: ethical leadership, virtuous leadership, and the measurement scales used to assess these leadership dimensions. The literature on ethical leadership highlighted the importance of leaders demonstrating ethical behavior and promoting ethical conduct among followers. I examined ethical leadership through theoretical frameworks such as transformational leadership theory and social learning theory (Brown et al., 2005). I also emphasized the positive outcomes associated with ethical leadership, including the establishment of an ethical climate and the promotion of employee ethical behavior (Mayer et al., 2012).

Virtuous leadership emphasizes the cultivation of virtues and moral character in leaders. The literature emphasized that virtuous leadership involves leaders displaying and promoting ethical behavior, virtues, and values to enhance personal and organizational well-being (Aguiling & Racelis, 2021; Cameron et al., 2004; Yang, 2021). I also highlighted the impact of virtuous leadership on organizational outcomes such as employee well-being, engagement, and organizational performance (Luthans & Avolio, 2003).

The literature review also encompassed an exploration of the measurement scales used to assess ethical and virtuous leadership. The ELS measures dimensions such as modeling ethical behavior, promoting ethical conduct, rewarding ethical behavior, and correcting unethical behavior. The VLQ assesses the extent to which individuals exhibit virtuous leadership behaviors, focusing on virtues such as integrity, humility, compassion, and justice.

Both scales have demonstrated strong psychometric properties, including validity and reliability. Researchers have used them to explore the relationship between ethical and virtuous leadership and various organizational outcomes. These scales have practical applications in leadership development programs and organizational assessments, enabling organizations to foster ethical and virtuous leadership behavior and enhance positive organizational outcomes.

Chapter 3: Methodology

The purpose of the study was to evaluate the relationship between virtuous and ethical leadership and the possible interchangeability of measurement instruments for each leadership style. I used a nonexperimental, quantitative research design to address the study's topic. This survey research included two standardized research instruments representing the study's research methodology. The following is a report of the study's essential methodological elements.

Research Design and Methodology

I used a nonexperimental, quantitative research design to address the study's topic (Edmonds & Kennedy, 2016). An advantage of nonexperimental research designs is that they allow studying a respective topic naturally as it occurs. Nonexperimental research designs are ideally suited for instances where the researcher is not confined to a cause-and-effect research problem requiring the manipulation of variables (Adams & McGuire, 2023). Quantitative research designs are advantageous in producing objective data that can be precisely communicated using numbers and statistical techniques. Additional benefits of these designs include objectivity, potential replication, statistical rigor, generalizability of study findings, and data-based decision-making.

The specific methodology for this study was a survey research approach. Survey research represents an effectual and efficient means by which information may be gathered from a large cohort of individuals. Jones et al. (2013) noted that among the advantages of using a survey research methodology, the generation of statistical power, and the ability to gather large amounts of information on a research topic make survey research an attractive means by which to gather information for study purposes.

Sample and Sample Selection

For this study, I engaged a professional data collection/survey company to conduct surveys among the target population, which included leaders, subordinates, and peers responsible for making direct reports and influencing others within their respective contexts. Participants were executives, managers, and supervisors who held decision-making authority and managerial responsibilities. Using the services of a data collection company, I targeted these participants using a purposive sampling technique. The survey

included for the potential participants a clear explanation of the purpose and significance of the study, a qualification statement and required a clear acknowledgment that they voluntarily chose to participate.

Purposive sampling allows the selection of participants with specific characteristics relevant to the research objectives (Creswell & Creswell, 2023), which was definitive of this study. For example, an individual in a temporary leadership position would not have the authority or time to implement either the ELS or the VLQ. Purposive sampling allows the researcher to avoid recruiting inappropriate participants. I accessed the study's sample from various industries and organizations to ensure a more comprehensive representation of virtuous and ethical leadership practices. The sampling method selected for study purposes allows the possibility of selecting all individuals within a population (Creswell & Creswell, 2023).

Simple random sampling represents a viable sampling technique and was relevant to the current study because the sampling frame was neither subdivided nor partitioned; thus, the sample was unbiased, and inferences may be generalized in the study's eventual findings (see Creswell & Creswell, 2023). Saturation determines the sample size where data are collected and analyzed regularly until no added information emerges or the theoretical saturation is achieved (Guest et al., 2006). In this study, data collection and analysis continued until saturation.

Participant Inclusion and Exclusion Criteria

Inclusion factors were individuals with leadership positions in their respective organizations, had direct reports, were responsible for leading and influencing others, and possessed decision-making authority and managerial responsibilities. Conversely, exclusion factors included individuals who did not hold leadership positions or have direct reports or leadership responsibilities and who were unable or unwilling to provide informed consent.

Research Instrumentation

The measurement scales used in this study to assess virtuous and ethical leadership were the ELS and the VLQ. These scales have been widely used in the literature. Each of these scales has shown strong psychometric properties in previous studies including reliability and validity. The use of established measurement scales

ensures the standardized assessment of virtuous leadership, ethical leadership, and the combined ethical and virtuous leadership constructs. The participants responded to the items on each scale of the two research instruments using a Likert-type scale ranging from "1" for *strongly disagree* to "5" for *strongly agree*. I administered the respective scales in a randomized order to minimize potential order effects.

The Ethical Leadership Scale

The ELS (Brown et al., 2005) is designed to measure the levels of ethical leadership. This scale assesses leaders' ethical behaviors such as setting ethical standards, promoting ethical decision-making, and fostering an ethical climate within the organization. The scale has demonstrated strong psychometric properties, including internal consistency reliability and convergent and discriminant validity (Brown et al., 2005; Mayer et al., 2012; Sen & Gocen, 2020). This scale is also replicable, making it ideal for repeated usage.

The Virtuous Leadership Scale (VLQ)

The VLQ (Wang & Hackett, 2016) is designed to measure the levels of virtuous leadership. The VLQ was developed to assess and promote virtuous leadership within organizations. This concept of virtuous leadership is deeply rooted in the philosophical traditions of virtue ethics, particularly those of Confucianism and Aristotelianism, as Hendriks et al. (2020) noted. Per these philosophical frameworks, virtues are both coherent and parsimonious, which essentially means virtues that are universally recognized as good and efficiently applicable in various contexts. The VLQ is designed to operationalize this concept by providing a set of questions or scenarios where the leadership's virtues are tested or exemplified. The questionnaire has undergone validation processes and has been reported to demonstrate satisfactory measurement properties, meaning it effectively captures the essence and practical implementation of virtuous leadership (Wang & Hackett, 2021; Yang, 2021). The VLQ includes 30 closed-structure survey items designed to assess the extent to which individuals perceive their supervisors or managers as embodying virtuous leadership qualities. Each item on the research instrument is represented through a 5-point Likert-type scale, which ranges from 1 = *strongly disagree* to 5 = *strongly agree*. This scale allows respondents to indicate the degree to which they agree or disagree with each statement about their supervisor's

behaviors and attributes (Wang & Hackett, 2016) and represents one of the more popular Likert-type scaling approaches in surveying (Dillman et al., 2014).

Research Questions

Two research questions and two corresponding hypotheses addressed this study's purpose:

RQ1: Is there a statistically significant, direct relationship between study participant perceptions of virtuous leadership and ethical leadership?

H_a 1: There will be a direct, statistically significant relationship between study participant perceptions of virtuous leadership and ethical leadership.

RQ2: Will the study participants' perceptions of virtuous leadership measurement represent a statistically significant predictor of their perceptions of ethical leadership?

H_a 2: There will be a direct, statistically significant predictive relationship between study participant perceptions of virtuous leadership and ethical leadership.

Data Analysis

To ensure the rigor and reliability of the findings in this dissertation, I adopted a comprehensive statistical approach, encompassing both preliminary and advanced analytical techniques. I laid the foundation of this analytical framework through a meticulous statistical power analysis followed by preliminary descriptive statistical analyses. These initial steps were critical in determining the appropriate sample sizes needed to achieve statistical significance for the study's research questions, enhancing the validity of the results.

Statistical Power Analysis

I conducted a statistical power analysis using the G*Power software (3.1.9.2, Universität Düsseldorf, Germany) in advance of the study for sample size estimates for statistical significance testing purposes in the study's two research questions, as Faul et al. (2009) noted. I delimited the study's statistical power analysis to the anticipated medium and large effects, a power $(1 - \beta)$ index of .80 and a probability level of .05.

RQ1 featured the Pearson product-moment correlation coefficient statistical technique for associative and statistical significance testing purposes. An anticipated medium effect ($r = .30$) would require 67 participants to detect a statistically significant finding. An anticipated large effect ($r = .50$) would require 23 participants to detect a statistically significant finding.

RQ2 featured the simple linear regression statistical technique for predictive and statistical significance testing purposes. An anticipated medium effect ($f^2 = .15$) would require 55 participants to detect a statistically significant finding. An anticipated large effect ($f^2 = .35$) would require 25 participants to detect a statistically significant finding.

Preliminary Descriptive Statistical Analyses

I first analyzed study data at a preliminary level ahead of the formal analysis of data associated with the study's two research questions. For this purpose, I used descriptive statistical techniques to assess the study's demographic variables by applying the statistical techniques of frequencies (n) and percentages ($\%$). Specifically, I employed descriptive statistical techniques to assess the study's survey item response data within the two research instruments used in this study. The study's survey item response data were more specifically addressed using frequencies (n), measures of central tendency (mean scores), variability (minimum/maximum; standard deviations), standard errors of the mean (SE_M), and data normality (skew; kurtosis).

I assessed the study's extent of missing data at the person level and with the survey item response sets using the descriptive statistical techniques frequencies (n) and percentages ($\%$). Using Little and Rubin's (2019) MCAR statistical technique, I assessed the randomness of missing data. I also evaluated the internal reliability of study participant responses to survey items represented on the study's two research instruments using Cronbach's alpha (Taber, 2018). This analysis involved applying the conventions of alpha interpretation that George and Mallery (2020) proposed to Cronbach alpha values achieved in the internal reliability analyses.

Analyses by Research Question and Hypothesis

I selected the probability level of $p < .05$ at the outset of the study to represent the threshold value for findings to be considered statistically significant in the analyses associated with the study's research questions and hypotheses. I interpreted the numeric

effect sizes achieved in the study's analyses associated with the research questions and hypotheses using the conventions of effect size interpretation proposed by Sawilowsky (2009).

For RQ1, I used the Pearson product-moment correlation coefficient to assess the mathematical relationship between participant perceptions of ethical leadership and virtual leadership. This analysis involved addressing the primary assumption associated with the use of the Pearson product moment correlation coefficient, linearity, through visual inspection of the scatter plot. Study data associated with the study's two research instruments were continuous in nature, represented at the interval level of measurement.

For RQ2, I used simple linear regression for predictive purposes. I addressed the assumptions associated with the use of a simple linear regression using statistical means (independence of error, normality of residuals, and influential outliers) and visual inspection of scatter plots (linearity and homoscedasticity). All analysis of the study data occurred using SPSS.

Chapter 4: Results

The purpose of this study was to evaluate the relationship between virtuous and ethical leadership and the possible interchangeability of measurement instruments for each construct. Chapter 4 contains the formal presentation of the study's findings. I used a quantitative, nonexperimental research design to address the study's topic. A survey research approach represented the study's research methodology. Data collection entailed using two standardized research instruments to elicit study participants' responses to survey items associated with the constructs of virtuous leadership and ethical leadership. Two research questions guided this study. I used descriptive and inferential statistical techniques to analyze the study data.

Findings: Descriptive Statistics

To comprehensively understand the dynamics and intricacies of the research data, I undertook a thorough preliminary descriptive statistical analysis. My aim for this foundational step was to meticulously evaluate the demographic attributes of the study's participants along with a detailed examination of their responses to the two used research instruments. Through the application of descriptive statistical methodologies, including the calculation of frequencies, percentages, measures of central tendency, variability, standard errors of the mean, and data normality, I was poised to construct a robust baseline understanding of the data set.

Demographic Information

I evaluated the study's demographic information using descriptive statistical techniques. Frequencies (*n*) and percentages (*%*) represented the descriptive statistical techniques used to evaluate the study's demographic information of participant gender, age, position, and income. Table 1 contains a summary of findings for the descriptive statistical evaluation of the study's demographic information.

Table 1

Descriptive Statistics Summary Table: Demographic Information (Gender, Age, Position, Income)

Demographic Variable	*n*	*%*	Cumulative *%*
Gender			
Female	299	43.27	43.27
Male	362	52.39	95.66
Missing	30	4.34	100.00
Age			
18 to 29	57	8.25	8.25
30 to 44	198	28.65	36.90
45 to 60	364	52.68	89.58
Over 60	42	6.08	95.66
Missing	30	4.34	100.00
Position			
Middle Management	285	41.24	41.24
Senior Management	127	18.38	59.62
Executive	220	31.84	91.46
Missing	59	8.54	100.00
Income			
$9,999 or Less	13	1.88	1.88
$10,000 to $24,999	14	2.03	3.91
$25,000 to $49,999	122	17.66	21.56
$50,000 to $74,999	98	14.18	35.75
$75,000 to $99,999	108	15.63	51.37
$100,000 t0 $124,999	104	15.05	66.43
$125,000 to $149,999	69	9.99	76.41
$150,000 to $174,999	69	9.99	86.40
$175,000 to $199,999	13	1.88	88.28
$200,000 and Greater	28	4.05	92.33
Missing	53	7.67	100.00

Note. Demographic information (gender, age, position, income) of participants.

Study Constructs

I conducted an evaluation of the study's constructs of virtuous leadership and ethical leadership using descriptive statistical techniques. To analyze the study's survey response data within the two constructs, I used the descriptive statistical techniques of frequencies (*n*), measures of central tendency (mean scores), variability (minimum/maximum and standard deviations), standard errors of the mean (SE_M), and

data normality (skew and kurtosis). Table 2 contains a summary of findings for the descriptive statistical analysis of the survey response data associated with the constructs of virtuous leadership and ethical leadership identified in this study.

Table 2

Descriptive Statistics Summary Table: Study Constructs (Virtuous Leadership and Ethical Leadership)

Construct	M	SD	n	SE_M	Min	Max	Skew	Kurtosis
Virtuous Leadership	4.09	0.82	534	0.04	1.00	5.00	-1.15	1.52
Ethical Leadership	4.12	0.81	533	0.04	1.00	5.00	-1.21	1.51

Note. A table showing descriptive statistics of the two constructs.

Table 3 contains a summary of findings for the descriptive statistical analysis of the study's survey response data associated with the constructs of virtuous leadership and ethical leadership identified in this study by the gender of the study participant.

Table 3

Descriptive Statistics Summary Table: Study Constructs (Virtuous Leadership and Ethical Leadership) by Gender of Participant

Gender/Construct	M	SD	n	SE_M	Min	Max	Skew	Kurtosis
Female								
Virtuous Leadership	3.95	0.88	213	0.06	1.00	5.00	-1.12	1.58
Ethical Leadership	4.01	0.85	213	0.06	1.00	5.00	-1.17	1.63
Male								
Virtuous Leadership	4.20	0.76	297	0.04	1.00	5.00	-1.09	0.96
Ethical Leadership	4.22	0.78	297	0.05	1.00	5.00	-1.22	1.28

Note. Statistics of the two constructs broken down by gender.

Table 4 contains a summary of findings for the descriptive statistical analysis of the survey response data associated with the constructs of virtuous leadership and ethical leadership identified in this study by the age category of the study participant.

Table 4

Descriptive Statistics Summary Table: Study Constructs (Virtuous Leadership and Ethical Leadership) by the Age of the Participant

Age/Construct	*M*	*SD*	*n*	*SE$_M$*	Min	Max	Skew	Kurtosis
18 to 29								
Virtuous Leadership	3.80	0.76	37	0.12	2.10	5.00	-0.34	-0.47
Ethical Leadership	3.84	0.86	37	0.14	1.70	5.00	-0.80	-0.03
30 to 44								
Virtuous Leadership	3.84	0.73	143	0.06	1.17	5.00	-0.79	1.13
Ethical Leadership	3.83	0.75	143	0.06	1.10	5.00	-0.73	0.40
45 to 60								
Virtuous Leadership	4.29	0.80	306	0.05	1.00	5.00	-1.60	2.90
Ethical Leadership	4.33	0.77	306	0.04	1.00	5.00	-1.72	3.54
Over 60								
Virtuous Leadership	3.59	0.95	24	0.19	1.00	5.00	-1.31	1.49
Ethical Leadership	3.80	0.92	24	0.19	1.00	5.00	-1.15	1.75

Note. Statistics of the two constructs broken down by age.

Table 5 contains a summary of findings for the descriptive statistical analysis of the survey response data associated with the constructs of virtuous leadership and ethical leadership identified in this study by the position of the study participant.

Table 5

Descriptive Statistics Summary Table: Study Constructs (Virtuous Leadership and Ethical Leadership) by the Position of the Participant

Position/Construct	*M*	*SD*	*n*	*SE$_M$*	Min	Max	Skew	Kurtosis
Middle Management								
Virtuous Leadership	3.70	0.80	189	0.06	1.00	5.00	-0.97	1.32
Ethical Leadership	3.78	0.82	188	0.06	1.00	5.00	-0.91	1.15
Senior Management								
Virtuous Leadership	4.07	0.75	126	0.07	1.17	5.00	-1.07	1.32
Ethical Leadership	4.11	0.76	126	0.07	1.90	5.00	-0.87	0.05
Executive-Owner								
Virtuous Leadership	4.51	0.63	204	0.04	1.69	5.00	-1.72	3.06
Ethical Leadership	4.49	0.65	204	0.05	1.70	5.00	-2.03	4.57

Note. Statistics of the two constructs broken down by participant.

Table 6 contains a summary of findings for the descriptive statistical analysis of the survey response data associated with the constructs of virtuous leadership and ethical leadership identified for the study purposes by income of the study participant.

Table 6

Descriptive Statistics Summary Table: Study Constructs (Virtuous Leadership and Ethical Leadership) by the Income of the Participant

Income/Construct	M	SD	n	SE_M	Min	Max	Skew	Kurtosis
$9,999 or Less								
Virtuous Leadership	2.96	1.45	8	0.51	1.00	4.45	-0.36	-1.46
Ethical Leadership	3.06	1.48	8	0.52	1.00	4.80	-0.41	-1.32
$10,000 to $24,999								
Virtuous Leadership	3.42	0.84	10	0.27	2.10	4.97	0.37	-0.58
Ethical Leadership	3.44	0.89	10	0.28	1.70	4.50	-0.68	-0.47
$25,000 to $49,999								
Virtuous Leadership	3.75	0.85	85	0.09	1.00	5.00	-0.75	0.63
Ethical Leadership	3.80	0.89	85	0.10	1.00	5.00	-0.74	0.39
$50,000 to $74,999								
Virtuous Leadership	3.75	0.75	67	0.09	1.86	5.00	-0.51	-0.28
Ethical Leadership	3.83	0.76	67	0.09	1.60	5.00	-0.63	-0.10
$75,000 to $99,999								
Virtuous Leadership	4.08	0.73	87	0.08	1.34	5.00	-0.96	1.68
Ethical Leadership	4.17	0.67	87	0.07	2.20	5.00	-0.70	0.07
$100,000 to $124,999								
Virtuous Leadership	4.40	0.78	87	0.08	1.00	5.00	-2.26	6.06
Ethical Leadership	4.38	0.78	87	0.08	1.00	5.00	-1.93	3.93
$125,000 to $149,999								
Virtuous Leadership	4.30	0.61	64	0.08	2.52	5.00	-0.84	0.46
Ethical Leadership	4.29	0.59	64	0.07	2.60	5.00	-1.02	1.16
$150,000 to $174,999								
Virtuous Leadership	4.68	0.47	60	0.06	2.66	5.00	-2.26	5.62
Ethical Leadership	4.67	0.49	60	0.06	2.60	5.00	-2.41	6.26
$175,000 to $199,999								
Virtuous Leadership	4.12	0.84	11	0.25	2.59	5.00	-0.43	-1.03
Ethical Leadership	4.20	0.84	11	0.25	2.60	5.00	-0.81	-0.58
$200,000 and Greater								
Virtuous Leadership	3.98	0.79	21	0.17	1.28	5.00	-1.79	4.61
Ethical Leadership	4.03	0.92	21	0.20	1.10	5.00	-1.56	2.99

Note. Statistics of the two constructs broken down by income.

Instrument Validation: Internal Reliability

  I addressed the internal reliability of study participants' responses to survey items represented on the study's research instrument using Cronbach's alpha (Taber, 2018). Evaluations of internal reliability addressed the two constructs identified for this study. The internal reliability levels achieved for the study's two constructs and for the participants' responses to survey items across both research instruments were excellent ($\alpha \geq .90$). The following tables contain a summary of findings for the internal reliability of the study participants responses within the study's two constructs of virtual leadership and ethical leadership.

Virtuous Leadership

  Table 7 contains a summary of findings for participant responses to survey items for the construct of virtuous leadership.

Table 7

Internal Reliability Summary Table: Virtuous Leadership

Construct	#. of Items	α	Lower Bound	Upper Bound
Virtuous Leadership	29	.98	.98	.98

Note. The lower and upper bounds of Cronbach's α were calculated using a 95.00% confidence.

Ethical Leadership

  Table 8 contains a summary of findings for participants' responses to survey items for the construct of ethical leadership.

Table 8

Internal Reliability Summary Table: Ethical Leadership

Construct	# of Items	α	Lower Bound	Upper Bound
Ethical Leadership	10	.95	.94	.96

Note. The lower and upper bounds of Cronbach's α were calculated using a 95.00% confidence interval.

Construct: Virtuous and Ethical Leadership

  Table 9 contains a summary of findings for participants' responses to survey items across the constructs of virtuous leadership and ethical leadership.

Table 9

Internal Reliability Summary Table: Virtual/Ethical Leadership

Scale	#. of Items	α	Lower Bound	Upper Bound
Virtual/Ethical Leadership	39	.99	.98	.99

Note. The lower and upper bounds of Cronbach's α were calculated using a 95.00% confidence interval.

Instrument Validation: Confirmatory Factor Analysis (CFA)

In this section, I address the rigor of instrument validation through CFA for the constructs of virtuous leadership and ethical leadership. Using CFA, I aimed to scrutinize the underlying structure of these leadership paradigms to affirm their theoretical foundations within the collected data. The application of maximum likelihood estimation facilitates an understanding of parameter estimates' accuracy, whereas the evaluation of model fit indices, such as CFI, RMSEA, and SRMR, offers insights into the model's overall adequacy. With a focus on sample size adequacy and the robustness of the model's fit to empirical data, this analysis underscores the empirical validity of the constructs.

Virtuous Leadership

I used a CFA model to determine whether the latent variable of virtuous leadership adequately described the data achieved in the study. The maximum likelihood estimation helped determine the standard errors for the parameter estimates. I evaluated the reliability of the analysis based on the sample size used to construct the CFA model and analyzed the results using CFA model fit indices (see Hooper et al., 2008). A summary of the results of the CFA model for the construct of ethical leadership is presented in Table 10.

Table 10

Unstandardized Loadings (Standard Errors), Standardized Loadings, and Significance Levels for Each Parameter in the CFA Model (N = 534)

Parameter Estimate	Unstandardized	Standardized	*P*
Loadings			
Virtuous Lead → Virt1	1.00(0.00)	0.75	--
Virtuous Lead → Virt2	1.07(0.06)	0.76	< .001
Virtuous Lead → Virt3	0.97(0.06)	0.67	< .001
Virtuous Lead → Virt4	1.06(0.06)	0.77	< .001
Virtuous Lead → Virt5	1.07(0.05)	0.83	< .001
Virtuous Lead → Virt6	0.99(0.05)	0.77	< .001
Virtuous Lead → Virt7	0.93(0.05)	0.79	< .001
Virtuous Lead → Virt8	1.11(0.05)	0.87	< .001
Virtuous Lead → Virt9	1.05(0.05)	0.82	< .001
Virtuous Lead → Virt10	1.15(0.05)	0.85	< .001
Virtuous Lead → Virt11	1.03(0.05)	0.80	< .001
Virtuous Lead → Virt12	0.93(0.05)	0.77	< .001
Virtuous Lead → Virt13	1.08(0.05)	0.84	< .001
Virtuous Lead → Virt14	1.18(0.05)	0.86	< .001
Virtuous Lead → Virt15	1.11(0.05)	0.86	< .001
Virtuous Lead → Virt16	1.14(0.05)	0.85	< .001
Virtuous Lead → Virt17	1.18(0.06)	0.85	< .001
Virtuous Lead → Virt18	1.05(0.05)	0.84	< .001
Virtuous Lead → Virt19	1.01(0.05)	0.81	< .001
Virtuous Lead → Virt20	1.04(0.05)	0.80	< .001
Virtuous Lead → Virt21	1.12(0.06)	0.79	< .001
Virtuous Lead → Virt22	1.13(0.05)	0.83	< .001
Virtuous Lead → Virt23	1.05(0.05)	0.82	< .001
Virtuous Lead → Virt24	1.07(0.05)	0.85	< .001
Virtuous Lead → Virt25	0.99(0.05)	0.80	< .001
Virtuous Lead → Virt26	0.97(0.05)	0.80	< .001
Virtuous Lead → Virt27	1.05(0.05)	0.79	< .001
Virtuous Lead → Virt28	1.08(0.05)	0.80	< .001
Virtuous Lead → Virt29	1.05(0.05)	0.80	< .001
Errors			
Error in Virt1	0.46(0.03)	0.44	< .001
Error in Virt2	0.48(0.03)	0.42	< .001
Error in Virt3	0.67(0.04)	0.55	< .001
Error in Virt4	0.46(0.03)	0.41	< .001
Error in Virt5	0.30(0.02)	0.31	< .001

Parameter Estimate	Unstandardized	Standardized	P
Error in Virt6	0.41(0.03)	0.41	< .001
Error in Virt7	0.30(0.02)	0.37	< .001
Error in Virt8	0.23(0.02)	0.24	< .001
Error in Virt9	0.32(0.02)	0.33	< .001
Error in Virt10	0.31(0.02)	0.28	< .001
Error in Virt11	0.36(0.02)	0.37	< .001
Error in Virt12	0.35(0.02)	0.41	< .001
Error in Virt13	0.29(0.02)	0.30	< .001
Error in Virt14	0.28(0.02)	0.26	< .001
Error in Virt15	0.25(0.02)	0.26	< .001
Error in Virt16	0.28(0.02)	0.27	< .001
Error in Virt17	0.31(0.02)	0.28	< .001
Error in Virt19	0.32(0.02)	0.35	< .001
Error in Virt20	0.36(0.02)	0.36	< .001
Error in Virt18	0.28(0.02)	0.30	< .001
Error in Virt21	0.45(0.03)	0.38	< .001
Error in Virt22	0.34(0.02)	0.32	< .001
Error in Virt23	0.31(0.02)	0.33	< .001
Error in Virt24	0.25(0.02)	0.27	< .001
Error in Virt25	0.32(0.02)	0.35	< .001
Error in Virt26	0.31(0.02)	0.36	< .001
Error in Virt27	0.39(0.02)	0.38	< .001
Error in Virt28	0.37(0.02)	0.35	< .001
Error in Virt29	0.36(0.02)	0.36	< .001
Error in Virtuous Lead	0.59(0.06)	1.00	< .001

Note. Parameters of the CFA model.

Sample Size/CFA Model Fitness

The participant to the item ratio for this analysis was approximately 9 to 1 where the study's sample size was 534, and the number of variables included was 58. According to the $N{:}q$ ratio rule-of-thumb, and Tabachnick and Fidell's (2007) general suggestion of a sample size threshold of 300 for factoring, the given sample size in the study was sufficient to produce reliable results. Using the fit indices associated with CFA modeling (Hooper et al., 2008), the CFI was between .93 and .95 (CFI = 0.93), indicating that the CFA model fits the study's data adequately. The RMSEA index was less than .08, (RMSEA = 0.07, 90% CI = [0.07, 0.08]), indicating a good model fit for the study's data,

and the SRMR was less than .05 (SRMR = 0.03), indicating that the CFA model fits the study's data well.

Ethical Leadership

I used a CFA model to determine whether the latent variable of ethical leadership adequately described the data collected in this study. Maximum likelihood estimation helped determine the standard errors for the parameter estimates. I evaluated the reliability of the analysis based on the sample size used to construct the CFA model and analyzed the results using CFA model fit indices (see Hooper et al., 2008). Table 11 depicts a summary of the results of the CFA model for the construct of ethical leadership.

Table 11

Unstandardized Loadings (Standard Errors), Standardized Loadings, and Significance Levels for Each Parameter in the CFA Model (N = 533)

Parameter Estimate	Unstandardized	Standardized	P
Loadings			
Ethical Lead → Eth1	1.00(0.00)	0.82	--
Ethical Lead → Eth2	0.90(0.05)	0.69	< .001
Ethical Lead → Eth3	0.99(0.04)	0.81	< .001
Ethical Lead → Eth4	1.06(0.04)	0.86	< .001
Ethical Lead → Eth5	1.00(0.04)	0.85	< .001
Ethical Lead → Eth6	1.07(0.05)	0.83	< .001
Ethical Lead → Eth7	1.02(0.05)	0.79	< .001
Ethical Lead → Eth8	1.05(0.04)	0.86	< .001
Ethical Lead → Eth9	1.04(0.05)	0.81	< .001
Ethical Lead → Eth10	1.01(0.05)	0.79	< .001
Errors			
Error in Eth1	0.30(0.02)	0.33	< .001
Error in Eth2	0.54(0.03)	0.53	< .001
Error in Eth3	0.31(0.02)	0.35	< .001
Error in Eth4	0.24(0.02)	0.26	< .001
Error in Eth5	0.24(0.02)	0.28	< .001
Error in Eth6	0.33(0.02)	0.32	< .001
Error in Eth7	0.38(0.03)	0.37	< .001
Error in Eth8	0.24(0.02)	0.26	< .001
Error in Eth9	0.34(0.02)	0.34	< .001
Error in Ethical Lead	0.61(0.05)	1.00	< .001
Error in Eth10	0.37(0.02)	0.37	< .001

Note. Parameters of the CFA model.

Sample Size/CFA Model Fitness

The participant-to-item ratio for this analysis was approximately 26 to 1 where the sample size was 533 and the number of variables included was 20. According to the *N:q* ratio rule-of-thumb, and Tabachnick and Fidell's (2007) general suggestion of a sample size threshold of 300 for factoring, the given sample size in the study was sufficient to produce reliable results. Using the fit indices associated with CFA modeling (Hooper et al., 2008), the TLI was greater than or equal to .95 (TLI = 0.97), indicating that the CFA model is a good fit for the study's data. The CFI was greater than .95 (CFI = 0.97), indicating that the CFA model fits the study's data well. The RMSEA index was less than .08, (RMSEA = 0.08, 90% CI = [0.07, 0.09]), indicating a good model fit for the study's data, and the SRMR was less than .05 (SRMR = 0.03), indicating that the CFA model fits the study's data well.

Findings: Research Questions

In this study, I proposed two research questions. I established the threshold value for findings achieved in the study's research questions to be considered statistically significant was established at $p < .05$ at the outset of the study. The following represents the reporting of study findings by research question.

Research Question #1

RQ1 was as follows: To what degree will participant perceptions of virtuous leadership be associated with perceptions of ethical leadership? I used the Pearson product-moment correlation coefficient to evaluate the mathematical relationship between participant perceptions of virtuous leadership and ethical leadership. Both variables in the analysis were continuous, interval level of measurement variables. Based on a visual inspection of the scatter plot of the analysis results, the assumption of linearity was satisfied. The relationship between participants' perceptions of virtuous leadership and ethical leadership was direct, statistically significant (p < .001, 95.00% CI = [.90, .92]), and very strong at $r = .91$. Table 12 contains a summary of findings for the evaluation of the mathematical relationship between participant perceptions of virtuous leadership and ethical leadership.

Table 12

Correlation Summary Table: Statistical Significance of the Mathematical Relationship Between Perceptions of Virtuous Leadership and Ethical Leadership

Variable Combination	r	95.00% CI	n	p
Virtuous Leadership-Ethical Leadership	.91	[.90, .92]	533	< .001

Research Question #2

RQ2 was as follows: Will participant perceptions of virtuous leadership represent a statistically significant predictor of perceptions of ethical leadership? I evaluated the predictive relationship between participant perceptions of virtuous leadership and ethical leadership using simple linear regression. Both variables in the analysis were continuous, interval levels of the measurement variables. I addressed the assumptions associated with linear regressions through statistical means (independence of error and normality of residuals) and visual inspection of scatter plots (linearity and homoscedasticity) and found them to be satisfied.

I addressed the assumption of influential outliers through visual inspection of a scatter plot using studentized residual analysis. With a studentized residual greater than 3.11 in absolute value, I found the 0.999 quantile of a t distribution with 532 degrees of freedom to be an extreme outlier. As a result, the extreme outliers were nine data points that exceeded the 3.11 level. For study purposes, I retained the outliers in the analysis.

The predictive model was statistically significant ($F(1,531) = 2{,}596.06$, $p < .001$, $R^2 = .83$) indicating that 83.02% of the variance in perceptions of ethical leadership is explainable by perceptions of virtuous leadership. Perceptions of virtuous were statistically significantly predictive of perceptions of ethical leadership ($B = 0.91$, $t_{(531)} = 50.95$, $p < .001$), indicating that on average, a one-unit increase in perceptions of virtuous leadership will increase the value of perceptions of ethical leadership by 0.91 units. The predictive effect in the analysis was considered huge ($r^2 = .83$). Table 13 contains a summary of findings for the evaluation of the predictive relationship between participant perceptions of virtuous leadership and ethical leadership.

Table 13

Linear Regression Summary Table: Participant Perceptions of Virtuous Leadership Predicting Perceptions Ethical Leadership

Model	B	SE	95.00% CI	β	t	p
(Intercept)	0.41	0.07	[0.27, 0.56]	0.00	5.55	< .001
Virtuous Leadership	0.91	0.02	[0.87, 0.94]	0.91	50.95	< .001

Summary

Chapter 4 of this work encompassed an exploration of the correlation between virtuous and ethical leadership alongside an evaluation of the interchangeability of instruments measuring these constructs. Using a quantitative, nonexperimental design, I employed survey methodology with two standardized instruments to gather responses related to virtuous and ethical leadership constructs. I applied descriptive and inferential statistical methods to analyze the data, revealing demographic distributions across gender, age, position, and income alongside descriptive statistics on the leadership constructs themselves. The demographic data indicated a diverse participant pool with a higher representation of men (52.39%) and individuals aged 45 to 60 (52.68%). Positions of participants varied with significant numbers in middle management (41.24%) and executive roles (31.84%) and varied income levels, reflecting a broad spectrum of the working population.

Further analysis of virtuous and ethical leadership constructs indicated positive perceptions of both leadership types with slightly higher mean scores for ethical leadership ($M = 4.12$) than for virtuous leadership ($M = 4.09$). When segmented by demographic factors such as gender, age, and position, these constructs showed nuanced differences in perceptions across these groups. For example, men scored higher on both constructs compared to women, and perceptions varied notably across age groups and job positions, suggesting demographic influences on leadership perceptions. The internal reliability for both constructs was exceptionally high ($\alpha \geq .90$) validating the measurement instruments. Confirmatory factor analysis further supported the constructs' validity demonstrating good model fits. Addressing the research questions, I found a strong, direct, and significant correlation ($r = .91$) between perceptions of virtuous and ethical leadership. Virtuous leadership significantly predicted ethical leadership

perceptions accounting for 83.02% of the variance in ethical leadership perceptions and highlighting a substantial predictive relationship between the two leadership perceptions.

Chapter 5: Discussion

This dissertation encompassed a study of the correlation of and between the constructs of virtuous and ethical leadership within organizational settings. I used two known and validated measurement scales and delved into their potential interchangeability and relational dynamics as well as the influence of demographic factors on these constructs. Through a quantitative, nonexperimental design employing survey methodology, I meticulously analyzed virtuous and ethical leadership constructs to understand the nuanced relationship between these two.

This chapter is grounded in a descriptive analysis of the survey results, offering a demographic snapshot of the participant pool, which aligns with the general demographics of the business world in being predominantly male and middle-aged, with a diverse representation across income levels, geographic locations, and positions within organizations. This demographic breakdown provides a foundational understanding of the sample, setting the stage for a deeper analysis into how these variables may influence perceptions of leadership qualities. This analysis uncovers a close alignment in participant perceptions as evidenced by the similarity in mean scores serving as the nexus between the chapter's focus and the broader research objectives. The exploration extends to assessing how these perceptions vary across the different demographic groups, uncovering that gender, age, position, and income levels play roles in shaping views on leadership. Notably, in the analysis I identify that perceptions of leadership virtues and ethics evolve with age and experience and are influenced by one's role and financial status within an organization.

The methodological rigor of this study is evident through the employment of internal reliability measures, confirmatory factor analysis, and linear regression analysis, which served to validate and quantify the relationship between the constructs. The findings from these analyses provide strong evidence of a significant, direct correlation between virtuous and ethical leadership, further supported by a predictive relationship where virtuous leadership significantly forecasts the perceptions of ethical leadership. This statistical evidence underscores the deep interconnection between these constructs, highlighting the impact of virtuous qualities on ethical leadership perceptions.

The nuanced understanding gained from this research illustrates the complexity of leadership qualities and the challenges in measuring and interpreting these constructs interchangeably. The implications of this study are twofold: (a) academically, this study enriches the discourse on leadership by providing empirical support for the interconnectedness of virtuous and ethical leadership; and (b) practically, this study offers insights for organizational development and leadership training programs, stressing the importance of fostering virtues in leaders to enhance ethical standards within organizations.

This chapter not only bridges a significant gap in leadership research but also sets a robust foundation for future inquiries into the dynamics between virtuous and ethical leadership. The meticulous statistical analysis, combined with a thoughtful examination of demographic influences, contributes a significant leap forward in understanding the intricate relationship between these leadership constructs. With this research, I offer a valuable contribution to both the theoretical underpinnings of leadership studies and the practical considerations for developing effective leaders in organizational contexts.

Answering the Research Questions

I set out to explore the nuanced dimensions of leadership within the contemporary organizational context, focusing specifically on ethical and virtuous leadership styles. My primary objective was to dissect and understand the interplay between these two leadership paradigms assessing their correlation, impact on organizational outcomes, and the feasibility of using existing measurement instruments interchangeably to evaluate their presence and efficacy within professional settings. Two central questions anchored this research:

RQ1: Is there a significant and positive correlation between the scores obtained from virtuous leadership measurement scales and ethical leadership measurement scales?

RQ2: Can the VLQ and ELS be utilized interchangeably without modification to measure outcomes in both virtuous and ethical leadership?

This chapter is dedicated to answering the core research questions that underpin this dissertation, systematically dissecting how the scores obtained from virtuous leadership measurement scales correlate with those from ethical leadership measurement scales and whether these tools can be interchangeably used without modification to

measure outcomes in both virtuous and ethical leadership contexts. In the sections below, I discuss the questions and divide them into subsections that delve into findings, relevant literature, and drawn conclusions, thereby providing a comprehensive understanding of the intricate relationship between virtuous and ethical leadership practices.

The above statistical findings are consistent with an emerging consensus in the literature on leadership, which advocates for an integrated perspective that transcends the traditional bifurcation of ethical and virtuous leadership into distinct categories. It resonates with previous studies in which researchers have emphasized the complementary nature of these leadership styles (Crossan et al., 2013) and challenged the notion that ethical and virtuous leadership are distinct. The findings further closely align with a burgeoning body of literature advocating for a more integrated view of leadership as posited by Benmira and Agboola (2021) and Hannah et al. (2020). Previous research often treated ethical and virtuous leadership as distinct constructs, focusing on ethical leadership to promote ethical conduct through actions and virtuous leadership to emphasize the embodiment of moral virtues. However, this study's findings suggest a more intertwined relationship, resonating with the sentiments of researchers such as Crossan et al. (2013) and Banks et al. (2016), who argued for the overlapping and complementary nature of these leadership styles. The empirical data in Chapter 4 demonstrate the practical manifestation of these two leadership styles. The correlation between the perceptions of virtuous and ethical leadership highlights their interconnectedness in practice, resonating with conceptual understandings discussed in Chapter 2.

The interchangeability of the ELS and the VLQ as measurement tools challenges existing methodologies in leadership studies. It diverges from previous research focused on the distinct outcomes associated with either ethical or virtuous leadership, supporting a unified approach to assessing moral leadership. The references to existing literature related to RQ2, focusing on the interchangeability of measurement tools for virtuous and ethical leadership as Zhang et al. (2019) discussed highlight the evolving understanding and assessment methods within the field of leadership studies. The discussion draws upon several key areas of literature.

Answering Research Question 1

The first section of this chapter focuses on RQ1: Is there a significant and positive correlation between the scores obtained from virtuous leadership measurement scales and ethical leadership measurement scales? With this question, I sought to uncover the degree of alignment and possible overlap between virtuous and ethical leadership constructs as perceived by the participants. This section first includes a presentation of the findings related to this question, followed by the integration of these findings with existing literature on leadership theory. Finally, conclusions based on the combined insights from empirical data and theoretical frameworks are drawn.

Findings Related to Research Question 1

In this study, I identified a significant positive correlation ($r = .91$) between the scores derived from virtuous leadership measurement scales and ethical leadership measurement scales. This correlation surpassed the usual expectations for related constructs, suggesting a close association between ethical and virtuous leadership within the examined contexts.

High Internal Reliability. The constructs measured by the ELS and the VLQ demonstrated an exceptionally high internal reliability, with a Cronbach's alpha of .99. This result indicates a strong consistency among the items within each scale, suggesting that they effectively capture the essence of ethical and virtuous leadership constructs. However, the high reliability also hints at the need for a closer examination of item redundancy or an overly narrow focus.

Strong Positive Correlation. I found a very strong positive correlation ($r = .91$) between ethical and virtuous leadership, significantly exceeding typical expectations for related constructs. This result suggests that ethical and virtuous leadership are nearly synonymous in the studied contexts, challenging the traditional distinction between these leadership styles and supporting a more integrated view of moral leadership. These findings highlight the interrelated nature of ethical and virtuous leadership constructs, suggesting that leaders who are perceived as virtuous are concurrently regarded as ethical by their followers. This significant correlation advocates for a holistic approach to leadership, where ethical actions and virtuous character are considered inseparable elements of effective leadership.

Divergence From Narrow Focused Studies. Unlike studies that have narrowly focused on the distinct outcomes associated with either ethical or virtuous leadership, the findings in this research support a unified perspective. The overlapping domains of these leadership styles are in agreement with recent meta-analyses (e.g., Bedi et al., 2016) that revealed both ethical and virtuous leadership to be positively related to similar organizational outcomes such as employee satisfaction, organizational commitment, and performance. This synthesis of implications and existing literature illustrates the study's contribution to bridging the conceptual gap between ethical and virtuous leadership. By demonstrating the significant correlation to and alignment with current academic discussions, this research enriches leadership theory and provides practical pathways for fostering holistic and morally grounded leadership within organizations.

For RQ1, I examined the correlation between scores obtained from virtuous leadership measurement scales and ethical leadership measurement scales. The conclusion drawn is that there is a strong positive correlation ($r = .91$) between these two constructs. This significant correlation indicates that perceptions of virtuous leadership are closely aligned with perceptions of ethical leadership among the participants.

Conclusions Related to Research Question 1

For RQ1, I examined the correlation between perceptions of virtuous and ethical leadership. In the hypothesis associated with this question, I anticipated a direct, statistically significant relationship between these perceptions, which the findings unequivocally confirmed. The findings revealed a very strong positive correlation ($r = .91$), indicating that the participants' perceptions of virtuous leadership are closely aligned with their perceptions of ethical leadership. This significant correlation underscores the intertwined nature of ethical and virtuous leadership constructs, suggesting that leaders who are perceived as virtuous are also seen as ethical by their followers.

In summary, the conclusion from RQ1 is that ethical and virtuous leadership are highly correlated. This finding reinforces the idea that moral leadership encompasses both ethical behaviors and virtuous characteristics. This challenges traditional distinctions and supports a unified theory of moral leadership, offering a comprehensive framework

for understanding and developing effective leadership in contemporary organizational contexts.

Answering Research Question 2

In the subsequent section, I address RQ2: Can the VLQ and ELS be used interchangeably without modification to measure outcomes in both virtuous and ethical leadership? In this question, I explored the practical implications of the correlation between virtuous and ethical leadership, investigating whether measurement instruments designed for one style can accurately capture the essence of the other. In this section, I meticulously present the findings pertinent to this inquiry, juxtapose these findings with scholarly discussions on the interchangeability of measurement tools in leadership studies, and conclude with a synthesis of empirical evidence and theoretical considerations that provides a grounded perspective on the interchangeability of virtuous and ethical leadership measurement instruments.

Findings Related to Research Question 2

The research confirmed that perceptions of virtuous leadership could predict perceptions of ethical leadership with a high degree of accuracy, as evidenced by an *F* value of 2,596.06. This significant predictive relationship explained a substantial 83.02% of the variance in perceptions of ethical leadership based on perceptions of virtuous leadership. The finding indicates a strong statistical significance and reinforces the model's robustness.

Predictive Relationship (*F* Value of 2,596.06). The predictive model examining the relationship between virtuous and ethical leadership demonstrated an extraordinarily high *F* value of 2,596.06, indicating a very strong statistical significance. This finding confirms that perceptions of virtuous leadership can serve as a powerful predictor of perceptions of ethical leadership, highlighting the robustness of the relationship between these constructs. The high *F* value reinforces the model's explanatory power and the strength of the association between virtuous and ethical leadership.

Substantial Variance Explanation. The predictive relationship explains a significant portion of the variance in perceptions of ethical leadership based on perceptions of virtuous leadership, which suggests that virtuous leadership qualities are closely aligned with and can predict ethical leadership perceptions. These findings

underline the potential for these constructs to be measured interchangeably, offering a practical solution for leadership assessment in both research and organizational contexts. The findings indicate that the ELS and VLQ can indeed be used interchangeably to gauge leadership qualities pertaining to both ethical and virtuous leadership, suggesting that these instruments, despite being designed to measure distinct but related constructs, are capable of effectively assessing the composite nature of moral leadership without requiring modifications. This interchangeability facilitates a streamlined approach to evaluating leadership, emphasizing the integrated nature of ethical and virtuous leadership in fostering a holistic and morally grounded leadership culture within organizations.

Integration of Ethical and Virtuous Leadership Constructs. The findings that measurement tools for virtuous and ethical leadership can be used interchangeably without modification resonate with recent scholarly discussions advocating for a more integrated approach to understanding moral leadership. This perspective challenges traditional methodologies that have treated ethical and virtuous leadership as separate entities promoting a unified framework for assessing leadership qualities (e.g., Crossan et al., 2013).

Methodological Advances in Leadership Research. The ability to use ELS and VLQ interchangeably represents a significant methodological advancement. It suggests a shift toward more holistic evaluation tools that can capture the multifaceted nature of leadership, echoing recent calls for innovative assessment techniques that encompass a broader range of moral leadership dimensions (Bedi et al., 2016).

Empirical Validation of Leadership Assessment Tools. The predictive relationship and substantial variance explanation provided using the ELS and the VLQ interchangeably contribute to the empirical validation of leadership assessment instruments. This relationship supports the notion that ethical and virtuous leadership, although conceptually distinct, share enough common ground to be effectively measured by the same scales. This finding is in line with research efforts aimed at refining and validating measurement scales to accurately reflect leadership constructs within diverse organizational contexts.

Practical Implications for Leadership Development

The interchangeability of the ELS and the VLQ also has practical implications for leadership development programs suggesting that organizations can simplify their assessment processes by using either tool to gauge both ethical and virtuous leadership qualities. This approach aligns with recent literature that has emphasized the importance of developing leaders who embody both ethical behaviors and virtuous traits, suggesting a move toward more integrated leadership development strategies (e.g., Cameron, 2021). In summary, the literature related to RQ2 supports a more integrated understanding of moral leadership and underscores the importance of methodological advancements in leadership assessment. By demonstrating that the ELS and the VLQ can be used interchangeably, this research contributes to the ongoing dialogue about the composite nature of moral leadership and the practical pathways for assessing and developing ethical and virtuous leaders within organizations.

Conclusions Related to Research Question 2

The findings suggest that the ELS and the VLQ can be used interchangeably to assess both ethical and virtuous leadership qualities, offering a methodological advancement in leadership research. This interchangeability facilitates a streamlined approach to leadership assessment, allowing a comprehensive evaluation of leaders' moral qualities. It paves the way for future investigations into the composite nature of moral leadership, enriching both theoretical frameworks and practical applications in leadership development. The conclusions drawn for RQ2, in which I explored the interchangeability of measurement tools for virtuous and ethical leadership, indicate that these tools can indeed be used interchangeably without modification to accurately measure outcomes in both domains.

Strong Predictive Capability. The findings demonstrate a significant predictive relationship between perceptions of virtuous and ethical leadership as evidenced by the extraordinarily high F value observed in the predictive model. This relationship underscores that virtuous leadership qualities not only align closely with but also serve as reliable predictors of ethical leadership perceptions. Thus, the measurement tools designed for assessing these constructs, specifically the ELS and the VLQ, are effectively interchangeable for evaluating leadership qualities within organizational contexts.

Practical Utility in Leadership Assessment. The ability to use the ELS and the VLQ interchangeably offers a practical advantage for organizations and researchers in leadership studies. It simplifies the leadership assessment process by allowing the use of either instrument to gauge both ethical and virtuous leadership qualities, facilitating a more streamlined and efficient approach to evaluating and developing leadership within organizations. This interchangeability indicates that these scales can capture the essence of moral leadership comprehensively, making them valuable tools for leadership development programs.

Contribution to Leadership Research Methodology. This conclusion contributes significantly to the methodology of leadership research by providing evidence for the use of a unified approach to measuring moral leadership constructs. It challenges the conventional practice of developing and using separate tools for closely related leadership dimensions advocating for a more integrated assessment framework that acknowledges the overlapping nature of ethical and virtuous leadership.

Advancing Integrated Moral Leadership Models. The findings support the advancement of integrated models of moral leadership that consider ethical behaviors and virtuous traits as interconnected dimensions of effective leadership. This relationship encourages a holistic view of leadership development and assessment, emphasizing the importance of nurturing both ethical decision-making skills and virtuous character traits in leaders to foster a more ethical and positively oriented organizational culture.

In summary, the study's findings pertaining to RQ2 affirm that the ELS and the VLQ can be used interchangeably, highlighting their effectiveness in capturing the nuanced aspects of moral leadership. This conclusion not only enriches the theoretical understanding of ethical and virtuous leadership's interconnected nature but also offers practical insights for organizations aiming to cultivate a leadership environment grounded in both ethical principles and virtuous behaviors.

For RQ2, I delved into whether perceptions of virtuous leadership could predict perceptions of ethical leadership. Per the hypothesis, there is a direct, statistically significant predictive relationship, which was robustly supported by the findings. The predictive model was statistically significant, explaining a substantial 83.02% of the variance in perceptions of ethical leadership based on perceptions of virtuous leadership.

This finding indicates that virtuous leadership qualities are not only aligned with but also serve as a predictor of ethical leadership perceptions, highlighting the potential for these constructs to be measured interchangeably.

Implications of the Overall Findings

The intersection of ethical and virtuous leadership within organizational settings serves as a pivotal area of study, shedding light on the intrinsic qualities that define effective leadership. In this section, I delve into the theoretical and practical implications of a significant correlation found between ethical and virtuous leadership measurement scales, challenging traditional leadership paradigms and advocating for a more integrated model of leadership development. Through exploring the synergistic relationship between ethical actions and virtuous character, this research contributes to a nuanced understanding of moral leadership, proposing a unified theory that blends both ethical behaviors and virtuous traits. The ensuing discussion highlights how these insights not only redefine theoretical frameworks but also offer tangible strategies for organizations to enhance leadership effectiveness through a comprehensive approach to leader development.

Theoretical Implications

The significant correlation between ethical and virtuous leadership measurement scales has profound theoretical implications. First, it challenges the conventional dichotomy between ethical and virtuous leadership within leadership theory. Second, by demonstrating their interconnectedness, this study supports a more holistic model of moral leadership where ethical actions and virtuous character are seen as inseparable elements contributing to effective leadership.

This research further enriches the ethical and virtuous leadership frameworks by suggesting that ethical leadership, with its focus on moral principles and conduct, and virtuous leadership, with its emphasis on character strengths and virtues, may indeed be two sides of the same coin. This relationship supports the argument for a unified theory of moral leadership that incorporates both ethical behaviors and virtuous traits, contributing to a more comprehensive understanding of what constitutes moral leadership.

Practical Implications

For organizations striving to augment leadership effectiveness, I provide several actionable insights. Recognizing the strong correlation between ethical and virtuous leadership can guide the development of leadership assessment and development programs that focus on both ethical behaviors and virtuous traits. Instead of treating these aspects separately, organizations can adopt a more integrated approach to leadership development that fosters the holistic growth of leaders.

Organizations can leverage this research to refine their leadership selection and evaluation criteria, ensuring that leaders are assessed not only on their ethical decision-making and conduct but also on their demonstration of virtuous traits such as courage, integrity, and humility. This assessment could involve revising leadership competency frameworks to include both ethical and virtuous dimensions and designing training programs that address the development of these interrelated aspects. The findings within this study relating to RQ1 not only enhance the theoretical understanding of leadership but also offer practical pathways for organizations to cultivate leaders who embody both ethical and virtuous qualities, fostering an ethical and positive organizational environment.

Contribution to the Field of Leadership Studies

This study makes a significant contribution to the field of leadership studies by bridging the conceptual gap between ethical and virtuous leadership. By demonstrating that a strong correlation and predictive relationship exists between these two constructs, the research supports a more integrated understanding of moral leadership that encompasses both ethical behaviors and virtuous character traits. This integrated perspective can enrich leadership theory by enhancing the comprehensiveness of the framework for understanding the multifaceted nature of moral leadership. The interchangeability of the ELS and the VLQ as measurement tools for assessing both ethical and virtuous leadership represents a methodological advancement in leadership research. This finding suggests that researchers and practitioners can use either scale to assess moral leadership qualities effectively, offering a practical solution to streamline leadership assessment processes in both research and organizational contexts.

In summary, the study's findings illuminate the deeply interconnected nature of ethical and virtuous leadership, offering valuable insights for both theoretical exploration and practical application in leadership development. By advancing the current understanding of how these constructs relate to each other and contributing to the methodological tools available for their assessment, this research enriches the tapestry of leadership studies and paves the way for future investigations into the composite nature of moral leadership.

Recommendations

Recommendations resulting from this research transition from the analysis and findings discussed earlier in this chapter (also in Chapter 4) to the practical and scholarly recommendations derived from the survey results on ethical and virtuous leadership. Given the closely correlation between these leadership paradigms, as established in this research, and its potentially significant influence on organizational culture and effectiveness, it is imperative to discuss recommendations for the strategies and directions for both current practice and future research. Accordingly, this section is organized into three subsections: recommendations for practice, recommendations for future research, and the development of a new combined instrument. In each of these subsections, I aim to provide targeted guidance for practitioners seeking to implement ethical and virtuous leadership principles, for researchers aspiring to explore this field further, and for the potential advancement of measurement tools that more accurately capture the essence of ethical and virtuous leadership.

For Practice

Organizations aiming to foster ethical and virtuous leadership can derive actionable insights from this study's findings. The strong correlation and predictive relationship between ethical and virtuous leadership underscore the importance of developing leadership programs that integrate both ethical behaviors and virtuous character traits.

Leadership Development Programs. Organizations should design and implement leadership development programs that emphasize not only the ethical decision-making aspects but also the cultivation of virtuous character traits such as

integrity, humility, and compassion. Such programs can include workshops, mentorship opportunities, and reflective practices that encourage leaders to develop a holistic understanding of moral leadership.

Assessment Tools Integration. Given the interchangeability of the ELS and the VLQ scales, as demonstrated in this study, organizations can use either instrument to assess and monitor the moral leadership qualities of their leaders. Regular assessments can help organizations identify areas for improvement and track the progress of their leadership development efforts over time.

Organizational Culture. An organization can promote an organizational culture that values transparency, ethical behavior, and virtuousness. This goal can be achieved through clear communication of ethical standards and by recognition of employees who demonstrate these qualities as well as by leadership setting a clear example.

Feedback Mechanisms. An organization can establish open and transparent feedback mechanisms that allow employees to voice concerns and observations regarding leadership behavior. Such feedback can be invaluable in identifying areas where ethical and virtuous leadership can be strengthened.

Enhanced Leadership Development. The intersections among ethical, virtuous, transformational, and servant leadership can be understood to inform the design of leadership-development programs. By recognizing the complementary nature of these leadership theories, organizations can develop training and development initiatives that encourage leaders to embody ethical and virtuous behaviors while cultivating the skills necessary for transformational and servant leadership. These programs could include workshops on ethical decision-making, exercises in empathy and humility, and training in visionary thinking and servant-oriented practices.

Practical Application in Diverse Contexts. The relationship between these leadership theories has practical implications for leadership practice in organizational contexts. For example, in industries where innovation and change are paramount, integrating ethical and virtuous leadership with transformational leadership principles could support leaders in navigating ethical dilemmas while driving innovation. Similarly, in service-oriented sectors, combining servant leadership with ethical and virtuous

principles could enhance leaders' ability to create supportive and empowering environments for their teams.

In conclusion, integrating ethical and virtuous leadership with transformational and servant leadership theories will not only enrich the current theoretical understanding of leadership but also provide a nuanced framework for developing effective leaders. This integrated approach highlights the importance of moral foundations in leadership and offers a pathway for cultivating leaders capable of navigating the complexities of contemporary organizational life while fostering positive outcomes for individuals and organizations alike.

Impact on Organizational Outcomes

The significance of leadership within any organizational context cannot be overstated, especially pertaining to the ethical and virtuous dimensions of leadership behavior. Ethical and virtuous leadership, characterized by a commitment to moral principles, integrity, altruism, and a concern for the common good, stands at the forefront of organizational success and sustainability. In this section, I aim to delve into the direct impact of such leadership on crucial organizational outcomes with a particular focus on employee well-being, job satisfaction, and overall performance. These three facets serve as pivotal indicators of an organization's health and are directly influenced by the leadership style employed at the helm.

Employee Well-Being

Employee well-being has become a paramount concern for organizations, given its impact on productivity, engagement, and retention. Investigating how ethical and virtuous leadership contributes to employee well-being can shed light on the mechanisms through which leadership influences the psychological and physical health of employees. For example, ethical leaders who prioritize transparency, fairness, and integrity may reduce workplace stress and promote a sense of security among employees, thereby enhancing their well-being. Similarly, virtuous leaders who exhibit compassion, humility, and courage can create supportive work environments that nurture employees' personal and professional growth.

Job Satisfaction

Job satisfaction is closely tied to employee motivation, performance, and loyalty. Future researchers should explore how the moral and character-driven focus of ethical and virtuous leadership affects employees' satisfaction with their jobs. Ethical and virtuous leadership may contribute to a work environment characterized by trust, respect, and fairness, which are factors known to enhance job satisfaction. Understanding the specific aspects of ethical and virtuous leadership that most strongly correlate with job satisfaction can help organizations tailor their leadership development efforts to maximize employee contentment and commitment.

Organizational Performance

The ultimate goal of leadership is to drive organizational success. By examining the direct impact of ethical and virtuous leadership on organizational performance, researchers can identify the pathways through which these leadership styles contribute to operational excellence, innovation, and competitiveness. For example, ethical leadership may enhance performance by fostering a culture of accountability and ethical decision-making, whereas virtuous leadership may promote resilience and adaptability among employees, leading to better organizational outcomes.

By examining the direct effects of ethical and virtuous leadership on key organizational outcomes, researchers can provide empirical evidence to support specific leadership practices. Understanding how these leadership styles influence organizational success can guide leaders in adopting behaviors and practices that promote positive outcomes. This evidence-based approach to leadership development can enhance the efficacy of leadership training programs and inform organizational policies that aim to foster ethical and virtuous leadership.

For Future Research

In this study, I have provided important insights into the relationship between ethical and virtuous leadership. I have also underscored several areas necessitating additional investigation. Given the constraints encountered in this research, in this section, I discuss recommendations for future research.

Cultural and Contextual Variations

Considering the role of contextual and cultural factors in shaping the impact of leadership on organizational outcomes is vital. The effectiveness of ethical and virtuous leadership practices may vary across industries, organizational cultures, and national cultures. In future studies, researchers should explore how these contextual factors moderate the relationship between leadership and organizational outcomes, providing insights into how ethical and virtuous leadership can be effectively implemented in diverse settings.

Longitudinal Studies

The cross-sectional nature of the current study provides a snapshot of the relationship between ethical and virtuous leadership at a single point in time. Longitudinal research is recommended to explore how ethical and virtuous leadership qualities develop and evolve over time within individuals and in response to changing organizational dynamics. Such studies could offer insights into the causality and dynamics of leadership development including how experiences, training, and organizational changes affect ethical and virtuous leadership behaviors.

Diverse Industries and Roles

Expanding the research to include a broader range of industries and leadership roles can provide a more comprehensive understanding of how ethical and virtuous leadership manifests in different professional contexts.

Integration With Other Leadership Theories

Investigating the relationship between ethical and virtuous leadership and other leadership theories such as transformational and servant leadership could offer deeper insights into the complex nature of leadership. This recommendation is particularly strong because it suggests the potential for a more comprehensive framework that integrates ethical and virtuous leadership with other well-established leadership theories. Exploring these relationships could illuminate the unique and overlapping contributions of different leadership styles to organizational and employee outcomes.

Expanding Leadership Models

Ethical and virtuous leadership focuses primarily on the moral and character-driven aspects of leadership. Integrating these aspects with transformational and servant

leadership models, which emphasize vision, inspiration, and service, could lead to a more comprehensive understanding of effective leadership. This integration could reveal how moral and ethical considerations underpin the transformative and service-oriented actions of leaders, providing a holistic model of leadership that encompasses a wide range of positive leadership behaviors.

Theoretical Synergies

Transformational leadership, which emphasizes inspiring followers to achieve extraordinary outcomes, and servant leadership, which prioritizes the growth and well-being of followers, share common ground with ethical and virtuous leadership in their focus on positive organizational and individual outcomes. By examining the synergies between these theories, researchers can uncover the foundational elements that contribute to effective leadership across different contexts. For example, the role of ethical principles in guiding transformational leaders' visionary strategies, or the virtuous traits that enable servant leaders to put their followers' needs first, could be explored in greater depth.

Measurement and Methodological Considerations

To accurately assess the impact of ethical and virtuous leadership on these outcomes, future researchers should employ robust methodological approaches and comprehensive measurement instruments. Longitudinal studies can provide insights into the long-term effects of ethical and virtuous leadership practices on organizational outcomes. Multisource data collection, incorporating employee surveys, performance metrics, and organizational records can enhance the validity of findings and provide a multifaceted view of the impact of leadership on organizational success. Finally, researchers should consider employing a mixed-methods approach to capture the nuanced relationship between these leadership styles. Qualitative studies, including in-depth interviews and case studies, could provide rich insights into how leaders integrate ethical, virtuous, transformational, and servant leadership principles in their day-to-day practices. The development and validation of comprehensive measurement instruments that capture the multidimensional nature of leadership incorporating ethical, virtuous, transformational, and servant dimensions could facilitate empirical studies in diverse organizational settings.

In summary, expanding the current understanding of the direct impact of ethical and virtuous leadership on organizational outcomes is crucial for building more resilient, productive, and humane workplaces. This line of inquiry not only contributes to the theoretical development of leadership studies but also offers practical guidance for organizations seeking to leverage leadership as a strategic asset for achieving success and fostering a positive work environment. By addressing these areas, future research can continue to build on the foundational knowledge this study has established, further advancing the current understanding of ethical and virtuous leadership and its significance in the modern organizational landscape.

Qualitative Research Design

Although the quantitative findings of this dissertation provide a robust analysis of the correlation between virtuous and ethical leadership, integrating qualitative methodologies can further enrich the current understanding of this topic. A qualitative approach allows the exploration of the complexities and subtleties inherent in leadership practices, offering a more nuanced view of how these leadership styles are manifested and perceived in the organizational context.

Rationale for a Qualitative Approach

Qualitative research methods, including interviews, focus groups, and case studies, can capture the depth and variety of leadership practices beyond what is measurable through quantitative scales. This approach facilitates a detailed exploration of leaders and followers' perspectives, experiences, and interpretations, providing a richer, more comprehensive understanding of virtuous and ethical leadership dynamics.

Proposed Qualitative Methods

Semistructured Interviews. Conducting interviews with organizational leaders and their subordinates can uncover insights into how virtuous and ethical leadership behaviors are enacted and perceived in daily operations. Interview questions can be used to explore experiences of ethical dilemmas, decision-making processes, and the impact of virtuous behaviors on team dynamics and morale.

Focus Groups. Bringing together groups of employees at various levels to discuss their perceptions of leadership within the organization can reveal shared views and divergent opinions on what constitutes ethical and virtuous leadership. Focus groups

can also be used to identify common scenarios that exemplify these leadership styles in action.

Case Studies. In-depth case studies of organizations known for their ethical and virtuous leadership practices can provide concrete examples of how such leadership influences organizational culture, employee engagement, and business outcomes. These case studies can serve as illustrative examples to complement quantitative data, offering practical insights into the successful implementation of virtuous and ethical leadership principles.

Integration with Quantitative Findings

The qualitative data obtained from these methods should be analyzed in conjunction with the quantitative findings to offer a more holistic view of the phenomena under study. Themes emerging from qualitative analyses can validate, expand upon, or challenge the quantitative results, leading to a more nuanced understanding of the interplay between virtuous and ethical leadership and organizational outcomes.

Implications for Future Research

Incorporating a qualitative approach opens new avenues for research, encouraging future explorations of contextual, cultural, and individual factors that influence the enactment and perception of virtuous and ethical leadership. It also suggests a framework for developing targeted interventions and leadership development programs that are grounded in the lived experiences of organizational members.

Conclusion

By expanding the research to include qualitative methods, the complexity and richness of ethical and virtuous leadership practices can be captured. This comprehensive approach not only enhances the current academic understanding but also provides valuable insights for practitioners aiming to cultivate ethical and virtuous leadership within their organizations.

New Combined Instrument

Based on the insights and discussions presented in this research, there is a compelling rationale for the creation of a novel, integrated measurement tool that amalgamates the ELS and the VLQ into a single consolidated scale. Such a scale would

eliminate the redundancy that was revealed by the study's resultant Cronbach's alpha of .99.

Factors to Warrant a New Instrument

From a theoretical perspective, the development of a new combined instrument is predicated on the recognition of the multifaceted nature of many research constructs. Traditional instruments, which often measure constructs in isolation, may not adequately capture the nuanced relationships and interactions between different variables. A combined instrument could address this limitation by integrating various dimensions into a singular measure. This approach will not only enhance the conceptual clarity of the constructs being studied, but it is also aligned with contemporary theoretical frameworks that advocate for a more holistic understanding of phenomena. By enabling a comprehensive measurement, the new instrument can contribute to theory building and refinement, offering insights that are more aligned with the complexity of real-world scenarios.

Strong Correlation and Predictive Relationship

In this study, I uncovered a very strong positive correlation ($r = .91$) between perceptions of virtuous and ethical leadership with virtuous leadership also being a significant predictor of ethical leadership. This significant overlap suggests that the constructs share common underlying dimensions that could be more efficiently assessed through a unified measurement tool.

Interchangeability of Instruments

The findings indicate that the ELS and the VLQ could be used interchangeably without significant loss of specificity or sensitivity in measuring leadership qualities. This interchangeability points to the feasibility of creating a combined instrument that captures the essence of both ethical and virtuous leadership without redundancy.

Theoretical Implications

This research highlights a convergence between ethical and virtuous leadership constructs, suggesting a unified domain of moral leadership. A combined instrument would reflect this theoretical integration, providing a comprehensive tool that encapsulates the broader spectrum of moral leadership qualities.

Practical Implications

From a practical standpoint, a combined instrument would simplify the leadership assessment process for organizations, making it more efficient to evaluate leaders' ethical and virtuous qualities. This instrument could streamline leadership development initiatives and make it easier for organizations to identify and cultivate leaders who embody both ethical behaviors and virtuous character traits.

Methodological Advancement

The development of a new instrument based on the strengths of the ELS and the VLQ could offer methodological improvements, including enhanced reliability, validity, and applicability across diverse organizational contexts. The new tool could also address potential limitations of the existing scales by incorporating recent theoretical and empirical insights into ethical and virtuous leadership.

Considerations Regarding the Development of a New Instrument

The development of a combined instrument would require careful consideration of the following factors to maintain the correlative nature exhibited in the findings herein.

- **Content validity:** The first consideration is to ensure that the new instrument comprehensively covers the key aspects of both ethical and virtuous leadership without overlapping or omitting crucial dimensions.

- **Construct Validity:** The second consideration is to ensure the combined instrument accurately measures the constructs it intends to assess, distinguishing between ethical and virtuous leadership and other related constructs.

- **Cultural and Contextual Sensitivity:** Subject to the limitations discussed, the third consideration is to adapt the instrument to be sensitive to cultural and organizational variations in the conceptualization and expression of ethical and virtuous leadership.

Overall, this study supports the idea of developing a new, combined instrument for ethical and virtuous leadership, promising a more integrated approach to understanding and cultivating moral leadership within organizations. This endeavor would contribute significantly to both academic research and practical leadership development, aligning with the evolving landscape of leadership studies.

Limitations of the Study

This study, although contributing valuable insights into the relationship between ethical and virtuous leadership, is subject to several limitations. These limitations pertain to the research methodology, data collection, and analysis processes, and they highlight areas for caution in interpreting the findings as well as directions for future research.

Cross-Sectional Design

In this study, I employed a cross-sectional research design to gain a snapshot of the relationship between ethical and virtuous leadership at a single point in time. This design limits the ability to infer causality or understand how these leadership qualities evolve over time. Longitudinal research designs would be beneficial for exploring these dynamics.

Self-Reported Data

The reliance on self-reported data through surveys introduces the potential for response bias, including social desirability bias. Participants may have responded in a manner they perceived to be favorable rather than reflecting their true perceptions and experiences. Using additional data collection methods, such as interviews or third-party assessments, could mitigate this limitation.

Use of Established Scales

Although the ELS and the VLQ scales are validated instruments for measuring ethical and virtuous leadership, respectively, their use is based on the assumption that these constructs are fully captured by the items within each scale. Some aspects of ethical and virtuous leadership may not be encompassed by these measures. Researchers could explore the development of additional items or scales to capture a more comprehensive range of leadership qualities.

Statistical Analysis

The findings of this study are based on statistical analyses that require the assumptions of linearity and homoscedasticity among variables to be met. These assumptions may not hold in all cases, potentially affecting the accuracy of the predictive relationships identified. Employing more complex statistical models that can account for nonlinear relationships and interaction effects could provide deeper insights into the nature of ethical and virtuous leadership.

Cultural and Contextual Factors

In this study, I did not explicitly account for cultural and contextual factors that could influence perceptions of leadership. Leadership qualities valued in one cultural or organizational context may differ from those in another, affecting the applicability of the findings across diverse settings. Acknowledging these limitations is crucial for interpreting the study's findings accurately and for guiding future research. By addressing these limitations, subsequent studies can enhance the current understanding of ethical and virtuous leadership and its impact on organizational success.

Final Thoughts

In this study, I explored the intricate relationship between ethical and virtuous leadership, as well as the examination of their measurement instruments, and opened a nuanced dialogue on leadership's broader implications for organizational behavior. The significant findings unearthed in this study underscore the profound impact that leadership, grounded in ethical and virtuous principles, can have on the fabric of organizational culture, employee well-being, and overall organizational effectiveness. When reflecting on the broader implications of this study, it becomes evident that leadership transcends mere organizational directives and performance metrics. Ethical and virtuous leadership embodies a deeper, more holistic approach to guiding organizations, a method that intertwines moral integrity with the relentless pursuit of excellence. Such leadership not only enhances the immediate work environment but also contributes to a more just, equitable, and humane society by extending its influence beyond organizational boundaries.

The alignment or divergence of my findings with existing literature reaffirms the complexity of leadership as a multifaceted construct, further highlighting the necessity for leaders to embrace both ethical and virtuous behaviors. This study illuminates the path for organizations to foster a leadership style that not only drives performance but also champions moral excellence and virtue as cornerstones of organizational culture. The practical implications of my findings provide a road map for organizations aspiring to cultivate an environment where ethical and virtuous leadership thrive. Implementing these insights can lead to a transformative shift in organizational paradigms, where leadership is not only about achieving goals but also about nurturing an organizational

ethos that values integrity, compassion, and a commitment to the greater good. In contemplating the future of leadership and organizational behavior, this study serves as a beacon, advocating for a leadership model that balances the demands of organizational success with the imperatives of ethical and virtuous conduct. Such a model not only enhances organizational performance but also contributes to the development of an ethical, virtuous, and resilient society.

With this study, I have contributed to the scholarly discourse on ethical and virtuous leadership, elucidating their pivotal roles in influencing organizational culture and effectiveness. By delving into the nuanced interplay between ethical and virtuous leadership and their assessment tools, this study underscores the transformative potential of leadership that is deeply rooted in moral principles and virtues. It reaffirms the notion that leadership extends beyond the confines of organizational success to include the fostering of an environment that values integrity, altruism, and collective well-being. As organizations navigate the complexities of the modern business landscape, the insights garnered from this study offer a valuable framework for nurturing leaders who embody ethical and virtuous qualities. Such leadership is imperative not only for the advancement of organizational objectives but also for the cultivation of a society that values justice, equity, and dignity. Moving forward, scholars and practitioners should continue to explore and embrace the integration of ethical and virtuous practices in leadership, recognizing their profound impact on organizational success and societal progress.

References

Adams, K. A., & McGuire, E. K. (2023). *Research methods, statistics, and applications* (3rd ed.). Sage.

Adewale, A. (2020). A model of virtuous leadership in Africa: Case study of a Nigerian firm. *Journal of Business Ethics*, *161*(4), 749–762. https://doi.org/10.1007/s10551-019-04340-3

Afsar, B., Bibi, A., & Umrani, W. A. (2020). Ethical leadership and service innovative behaviour of hotel employees: The role of organisational identification and proactive personality. *International Journal of Management Practice*, *13*(5), 503–520. https://doi.org/10.1504/ijmp.2020.110003

Aguiling, M. A., & Racelis, A. (2021). Virtuous leadership for the new normal: Identifying leadership virtues in a Philippine leadership program. *Philippine Academy of Management E-journal*, *4*(1), 23–34. https://animorepository.dlsu.edu.ph/faculty_research/8687

Ahmad, I., Gao, Y., Su, F., & Khan, M. K. (2023). Linking ethical leadership to followers' innovative work behavior in Pakistan: The vital roles of psychological safety and proactive personality. *European Journal of Innovation Management*, *26*(3), 755–772. https://doi.org/10.1108/ejim-11-2020-0464

AlHalaseh, R. H., & Alrawadyeh, W. E. (2020). The impact of virtuous leadership in organizational excellence as perceived by the academic staff at Mutah University. *Humanities and Social Sciences Series*, *35*(5), 13–36. https://doi.org/10.35682/0062-035-005-011

Al Halbusi, H., Tehseen, S., Hamid, F. A., & Afthanorhan, A. (2018). A study of Organizational Justice on the Trust in organization under the mediating role of ethical leadership. *Business Ethics and Leadership*, *2*(4), 89–98. https://doi.org/10.21272/bel.2(4).89-98.2018

Anser, M. K., Ali, M., Usman, M., Rana, M. L. T., & Yousaf, Z. (2021). Ethical leadership and knowledge hiding: An intervening and interactional analysis. *The Service Industries Journal*, *41*(5–6), 307–329. https://doi.org/10.1080/02642069.2020.1739657

Aristotle. (2000). *Nicomachean ethics*. Oxford University.

Avey, J. B., Reichard, R. J., Luthans, F., & Mhatre, K. H. (2011). Meta-analysis of the impact of positive psychological capital on employee attitudes, behaviors, and performance. *Human Resource Development Quarterly*, *22*, 127–152. https://doi.org/10.1002/hrdq.20070

Babbie, E. (2013). *The practice of social research* (13th ed.). Cengage Learning.

Bandura, A. (1971). *Social learning theory*. General Learning.

Banks, G. C., McCauley, K. D., Gardner, W. L., & Guler, C. E. (2016). A meta-analytic review of authentic and transformational leadership: A test for redundancy. *The Leadership Quarterly*, *27*(4), 634–652. https://doi.org/10.1016/j.leaqua.2016.02.006

Bass, B. M., & Riggio, R. E. (2005). *Transformational leadership*. Psychology Press. https://doi.org/10.4324/9781410617095

Bedi, A., Alpaslan, C. M., & Green, S. (2016). A meta-analytic review of ethical leadership outcomes and moderators. *Journal of Business Ethics*, *139*(3), 517–536. https://doi.org/10.1007/s10551-015-2625-1

Benevene, P., Buonomo, I., & West, M. (2020). The relationship between leadership behaviors and volunteer commitment: The role of volunteer satisfaction. *Frontiers in Psychology*, *11*, Article 602466. https://doi.org/10.3389/fpsyg.2020.602466

Benmira, S., & Agboola, M. (2021). Evolution of leadership theory. *BMJ Leader*, *5*(1), 3–5. https://doi.org/10.1136/leader-2020-000296

Blau, P. M. (1964). *Exchange and power in social life*. Transaction.

Brown, M. E., & Mitchell, M. S. (2010). Ethical and unethical leadership: Exploring new avenues for future research. *Business Ethics Quarterly*, *20*(4), 583–616. https://doi.org/10.5840/beq201020439

Brown, M. E., & Treviño, L. K. (2014). Do role models matter? An investigation of role modeling as an antecedent of perceived ethical leadership. *Journal of Business Ethics*, *122*(4), 587–598. https://doi.org/10.1007/s10551-013-1769-0

Brown, M. E., Treviño, L. K., & Harrison, D. A. (2005). Ethical leadership: A social learning perspective for construct development and testing. *Organizational Behavior and Human Decision Processes*, *97*(2), 117–134. https://doi.org/10.1016/j.obhdp.2005.03.002

Cameron, K. S. (2021). Responsible leadership as virtuous leadership. *Responsible Leadership*, 133–153. https://doi.org/10.4324/b22741-9

Cameron, K. S., Bright, D., & Caza, A. (2004). Exploring the relationships between organizational virtuousness and performance. *American Behavioral Scientist*, *47*(6), 766–790. https://doi.org/10.1177/0002764203260209

Cameron, K. S., Dutton, J. E., & Quinn, R. E. (2003). *Positive organizational scholarship: Foundations of a new discipline*. Berrett-Koehler.

Cameron, K. S., & Spreitzer, G. M. (2012). *The Oxford handbook of positive organizational scholarship*. Oxford University.

Cameron, K.S. and Winn, B. (2012), "Virtuousness in organizations", in Cameron, K.S. and Spreitzer, G.M. (Eds.), *The Oxford Handbook of Positive Organizational Scholarship,* Oxford University Press, pp. 231-243

Cheng, C. Y., Jiang, D. Y., Cheng, B. S., Riley, J. H., & Jen, C. K. (2015). When do subordinates commit to their supervisors? Different effects of perceived supervisor integrity and support on Chinese and American employees. *Leadership Quarterly*, *26*, 81–97. https://doi.org/10.1016/j.leaqua.2014.08.002

Chuang, A., Shen, C., & Judge, T. A. (2016). Development of a multidimensional instrument of person-environment fit: The perceived person-environment fit scale (PFS). *Applied Psychology: An International Review*, *1*, 66–98. https://doi.org/10.1111/apps.12036

Chun, R. (2005). Ethical character and virtue of organizations: An empirical assessment and strategic implications. *Journal of Business Ethics*, *57*, 269–284. https://doi.org/10.1007/s10551-004-6591-2

Ciulla, J. B. (1998). *Ethics, the heart of leadership*. Praeger.

Ciulla, J. B., Price, T. L., & Murphy, S. E. (Eds.). (2006). *The quest for moral leaders: Essays on leadership ethics*. Edward Elgar.

Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Routledge.

Cooper, T. (2018). *Handbook of administrative ethics*. Routledge.

Creswell, J. W., & Creswell, J. D. (2023). *Research design: Qualitative, quantitative, and mixed methods approaches*. Sage.

Crossan, M., Mazutis, D., Seijts, G., & Gandz, J. (2013). Developing leadership character in Business Programs. *Academy of Management Learning & Education*, *12*(2), 285–305. https://doi.org/10.5465/amle.2011.0024a

Curtis, R. V., Ronan, K. R., & Bordens, K. S. (2016). The research design for correlational studies. In R. V. Curtis, K. R. Ronan, & K. S. Bordens (Eds.), *Research methods in psychology: Evaluating a world of information* (2nd ed., pp. 177–204). Wiley.

Demirtas, O., Gok, K., Atsan, N., & Akdogan, A. A. (2015). Selecting the optimal strategy model to minimize decision failures under stress. *Journal of Global Strategic Management*, *1*(9), 41–41. https://doi.org/10.20460/jgsm.2015915627.

Den Hartog, D. N., & Belschak, F. D. (2012). Work engagement and machiavellianism in the ethical leadership process. *Journal of Business Ethics*, *107*(1), 35–47. https://doi.org/10.1007/s10551-012-1296-4

DeRue, D. S., Nahrgang, J. D., Wellman, N., & Humphrey, S. E. (2011). Trait and behavioral theories of leadership: An integration and meta-analytic test of their relative validity. *Personnel Psychology*, *64*(1), 7–52. https://doi.org/10.1111/j.1744-6570.2010.01201.x

Dillman, D. A., Smyth, J. D., & Christian, L. M. (2014). *Internet, phone, mail, and mixed-mode surveys: The tailored design method*. John Wiley & Sons.

Edmonds, W. A., & Kennedy, T. D. (2016). *An applied guide to research designs: Quantitative, qualitative, and mixed methods*. Sage.

Ehrhart, M. G., Ehrhart, K. H., Roesch, S. C., Chung, B., & Ahmad, S. (2019). Leadership and occupational health: The mediating role of psychological capital and the moderating role of job insecurity. *Journal of Occupational Health Psychology*, *24*(4), 489–502. https://doi.org/10.1037/ocp0000139

Eluwole, K. K., Karatepe, O. M., & Avci, T. (2022). Ethical leadership, trust in organization and their impacts on critical hotel employee outcomes. *International Journal of Hospitality Management*, *102*, Article 103153. https://doi.org/10.1016/j.ijhm.2022.103153

Faul, F., Erdfelder, E., Buchner, A., & Lang, A. G. (2009). Statistical power analyses using G* Power 3.1: Tests for correlation and regression analyses. *Behavior Research Methods*, *41*(4), 1149–1160. https://doi.org/10.3758/brm.41.4.1149

Ferrell, O. C., Harrison, D. E., Ferrell, L., & Hair, J. F. (2019). Business ethics, corporate social responsibility, and brand attitudes: An exploratory study. *Journal of Business Research*, *95*, 491–501. https://doi.org/10.1016/j.jbusres.2018.07.039

Field, A. (2018). *Discovering statistics using IBM SPSS statistics* (5th ed.). Sage.

Flynn, G. (2008). The virtuous manager: A vision for leadership in business. In G. Flynn (Ed.), *Leadership and business ethics. Issues in business ethics* (vol. 25). Springer, Dordrecht. https://doi.org/10.1007/978-1-4020-8429-4_4

Fuller, L. P. (2021). Foundational leadership theory: An ethical leadership approach to developing positive employee work engagement. *Open Journal of Business and Management*, *9*(5), 2136–2151. https://doi.org/10.4236/ojbm.2021.95113

Fuller, L. P., & Jones, G. R. (2021). Foundational leadership theory: A new ethical approach to reducing knowledge-hiding practices among employees. *International Journal of Social Science Studies*, *9*, 67–89. https://doi.org/10.11114/ijsss.v9i5.5286

George, D., & Mallery, P. (2020). *IBM SPSS statistics 28 step by step: A simple guide and reference* (17th ed.). Routledge.

Gonzalez-Padron, T. L., Ferrell, O. C., Ferrell, L., & Smith, I. A. (2012). A critique on giving voice to values approach to business ethics education. *Journal of Academic Ethics*, *10*, 251–269. https://doi.org/10.1007/s10805-012-9168-1

Graham, J. W. (2012). *Missing data: Analysis and design*. Springer Science & Business Media.

Greenbaum, R. L., Babalola, M., Quade, M. J., Guo, L., & Kim, Y. C. (2021). Moral burden of bottom-line pursuits: How and when perceptions of top management bottom-line mentality inhibit supervisors' ethical leadership practices. *Journal of Business Ethics*, *174*, 109–123. https://doi.org/10.1007/s10551-020-04546-w

Greenleaf, R. K. (1977). *Servant leadership: A journey into the nature of legitimate power and greatness.* Paulist.

Grimani, A., & Gotsis, G. (2020). *Fostering inclusive organizations through virtuous leadership*. In J. Marques (Ed.), *The Routledge companion to inclusive leadership* (pp. 78–98). Routledge.

Guest, G., Bunce, A., & Johnson, L. (2006). How many interviews are enough? An experiment with data saturation and variability. *Field Methods*, *18*(1), 59–82. https://doi.org/10.1177/1525822x05279903

Hackett, R. D., & Wang, G. (2012). Virtues and leadership. *Management Decision*, *50*(5), 868–899. https://doi.org/10.1108/00251741211227564

Hannah, S. T., Perez, A. L., Lester, P. B., & Quick, J. C. (2020). Bolstering workplace psychological well-being through transactional and Transformational leadership. *Journal of Leadership & Organizational Studies*, *27*(3), 222–240. https://doi.org/10.1177/1548051820933623

Hansen, J. A., & Pihl-Thingvad, S. (2018). Managing employee innovative behaviour through transformational and transactional leadership styles. *Public Management Review*, *21*(6), 918–944. https://doi.org/10.1080/14719037.2018.1544272

Hartnell, C. A., Ou, A. Y., & Kinicki, A. (2011). Organizational culture and organizational effectiveness: A meta-analytic investigation of the Competing Values Framework's (CVF) theoretical suppositions. *Journal of Applied Psychology*, 96, 677–694. https://doi.org/10.1037/a0021987

Hassan, S., Kaur, P., Muchiri, M., Ogbonnaya, C., & Dhir, A. (2022). Unethical leadership: Review, synthesis and directions for future research. *Journal of Business Ethics*, *183*(2), 511–550. https://doi.org/10.1007/s10551-022-05081-6

Hawkins, P. (2021). *Leadership team coaching: Developing collective transformational leadership.* Kogan page publishers.

Hemingway, C., & Maclagan, P. (2004). Managers' personal values as drivers of corporate social responsibility. *Journal of Business Ethics*, *50*(1), 33–44. https://doi.org/10.1023/B:BUSI.0000020964.80208.c9

Hendriks, M., Burger, M., Rijsenbilt, A., Pleeging, E., & Commandeur, H. (2020). Virtuous leadership: A source of employee well-being and trust. *Management Journal Review*, *43*(8), 951–970. https://doi.org/10.1108/MRR-07-2019-0326

Hooper, D., Coughlan, J., & Mullen, M. R. (2008). Structural equation modelling: Guidelines for determining model fit. *Electronic Journal of Business Research Methods*, *6*(1), 53–60. https://doi.org/10.21427/D7CF7R

IBM Corp. (2021). *IBM SPSS Statistics for Windows, Version 28.0* [computer software]. IBM Corp.

Jin, X., Qing, C., & Jin, S. (2022). Ethical leadership and innovative behavior: Mediating role of voice behavior and moderated mediation role of psychological safety. *Sustainability*, *14*(9), 5125. https://doi.org/10.3390/su14095125.

Jones, T., Baxter, M., & Khanduja, V. (2013). A quick guide to survey research. *The Annals of the Royal College of Surgeons of England*, *95*(1), 5–7. https://doi.org/10.1308/003588413x13511609956372

Judge, T. A., Thoresen, C. J., Bono, J. E., & Patton, G. K. (2001). The job satisfaction–job performance relationship: A qualitative and quantitative review. *Psychological Bulletin*, *127*(3), 376–407. https://doi.org/10.1037/0033-2909.127.3.376

Kalshoven, K., Den Hartog, D. N., & De Hoogh, A. H. B. (2011). Ethical leadership at work questionnaire: Development and validation of a multidimensional measure. *Journal of Business Ethics*, *98*(4), 601–615. https://doi.org/10.1016/j.leaqua.2010.12.007

Kalyar, M. N., Usta, A., & Shafique, I. (2020). When ethical leadership and LMX are more effective in prompting creativity: The moderating role of psychological capital. *Baltic Journal of Management*, *15*(1), 61–80. https://doi.org/10.1108/BJM-02-2019-0042

Kant, I. (1997). *Groundwork of the metaphysics of morals* (M. J. Gregor & J. Timmermann, Trans.). Cambridge University.

Korsgaard, M. A. (2020). Ethical leadership: Progress, problems, and prospects. *Journal of Business Ethics*, *167*(3), 377–392.

Kuenzi, M., & Schminke, M. (2016). Assembling fragments into a lens: A review, critique, and proposed research agenda for the organizational work climate literature. *Journal of Management*, *42*(1), 634–717. https://doi.org/10.1177/01492063083305

Lasrado, F., & Kassem, R. (2021). Let's get everyone involved! The effects of transformational leadership and organizational culture on organizational excellence. *International Journal of Quality & Reliability Management*, *38*(1), 169–194. https://doi.org/10.1108/ijqrm-11-2019-0349

Leedy, P. D., & Ormrod, J. E. (2016). The correlational research design. In P. D. Leedy & J. E. Ormrod (Eds.), *Practical research: Planning and design* (12th ed., pp. 190–227). Pearson.

Lemoine, G. J., Hartnell, C. A., & Leroy, H. (2019). Taking stock of moral approaches to leadership: An integrative review of ethical, authentic, and servant leadership. *Academy of Management Annals*, *13*(1), 148–187. https://doi.org/10.5465/annals.2016.0121

Li, X., Huang, J., Li, P., & Zhang, C. (2021). Ethical leadership and employee job satisfaction and affective organizational commitment: A meta-analysis. *Journal of Business Ethics*. https://doi.org/10.1007/s10551-021-04782-1

Lilius, J. M., Worline, M. C., Dutton, J. E., Kanov, J. M., & Maitlis, S. (2011). Understanding compassion capability. *Human Relations*, *64*(7), 873–899. https://doi.org/10.1177/0018726710396250

Little, R. J. A., & Rubin, D. B. (2019). *Statistical analysis with missing data* (3rd ed.). John Wiley & Sons.

Liu, X., Huang, Y., Kim, J., & Na, S. (2023). How ethical leadership cultivates innovative work behaviors in employees? Psychological safety, work engagement and openness to experience. *Sustainability*, *15*(4), Article 3452. https://doi.org/10.3390/su15043452

Luthans, F., & Avolio, B. J. (2003). Authentic leadership development. In K. S. Cameron, J. E. Dutton, & R. E. Quinn (Eds.), *Positive organizational scholarship: Foundations of a new discipline* (pp. 241–258). Berrett-Koehler.

Mango, E. (2018). Rethinking leadership theories. *Open Journal of Leadership*, *7*, 57–88. https://doi.org/10.4236/ojl.2018.71005

Martin, K. D., Cullen, J. B., Johnson, J. L., & Parboteeah, K. P. (2019). Deciding to bribe: A cross-level analysis of firm and home country influences on bribery activity. *Academy of Management Journal*, *62*(4), 1092–1115. https://doi.org/10.5465/amj.2007.28179462

Mayer, D. M., Aquino, K., Greenbaum, R. L., & Kuenzi, M. (2012). Who displays ethical leadership, and why does it matter? An examination of antecedents and consequences of ethical leadership. *Academy of Management Journal*, *55*(1), 151–171. https://doi.org/10.5465/amj.2008.0276

Mihelic, K. K., Lipicnik, B., & Tekavcic, M. (2010). Ethical leadership. *International Journal of Management & Information Systems*, *14*(5), 31–42. https://doi.org/10.19030/ijmis.v14i5.11

Mo, S., & Shi, J. (2017). Linking ethical leadership to employee burnout, workplace deviance and performance: Testing the mediating roles of trust in leader and surface acting. *Journal of Business Ethics*, *144*(2), 293–303. https://doi.org/10.1007/s10551-015-2821-z

Moore, C., Mayer, D. M., Chiang, F. F., Crossley, C., Karlesky, M. J., & Birtch, T. A. (2019). Leaders matter morally: The role of ethical leadership in shaping employee moral cognition and misconduct. *Journal of Applied Psychology*, *104*(1), 123–145. https://doi.org/10.1037/apl0000341

Nassif, A. G., Hackett, R. D., & Wang, G. (2021). Ethical, virtuous, and charismatic leadership: An examination of differential relationships with follower and leader outcomes. *Journal of Business Ethics*, *172*, 581–603. https://doi.org/10.1007/s10551-020-04491-8

Nembhard, I. M., & Edmondson, A. C. (2006). Making it safe: The effects of leader inclusiveness and professional status on psychological safety and improvement efforts in health care teams. *Journal of Organizational Behavior*, *27*(7), 941–966. https://doi.org/10.1002/job.413

Neubert, M. J., Carlson, D. S., Kacmar, K. M., Roberts, J. A., & Chonko, L. B. (2009). The virtuous influence of ethical leadership behavior: Evidence from the field. *Journal of business ethics, 90*, 157-170. https://doi.org/10.1007/s10551-009-0037-9

Newstead, T., Dawkins, S., Macklin, R., & Martin, A. (2019). We don't need more leaders – We need more *good* leaders. Advancing a virtues-based approach to leader(ship) development. *The Leadership Quarterly*, *32*(5), Article 101312. https://doi.org/10.1016/j.leaqua.2019.101312

Nielsen, M. B., Indregard, A. M. R., Mathisen, G. E., & Knardahl, S. (2020). Transformational leadership as a moderator in the relationship between job demands, job resources, and sickness absence: A two-wave study. *Work & Stress*, *34*(2), 107–126.

Ozkan, S. A., & Ardic, K. (2022). Business innovation management: A general overview to virtuous leadership. *Marketing and Management Innovations*, *13*(2), Article 17. https://doi.org/10.21272/mmi.2022.2-17

Pallant, J. (2021). *SPSS survival manual: A step by step guide to data analysis using IBM SPSS* (7th ed.). Open University.

Pearce, C., & Sims, H. P. (2002). *Team Effectiveness Scale*. [Dataset Record]. APA PsycTests. https://doi.org/10.1037/t09269-000

Peterson, C., & Seligman, M. E. P. (2004). *Character strengths and virtues: A handbook and classification*. Oxford University.

Peterson, S. J., Walumbwa, F. O., Byron, K., & Myrowitz, J. (2009). CEO positive psychological traits, transformational leadership, and firm performance in high-technology start-up and established firms. *Journal of Management*, *35*(2), 348–368. https://doi.org/10.1177/0149206307312512

Piccolo, R. F., Greenbaum, R., Hartog, D. N. D., & Folger, R. (2010). The relationship between ethical leadership and core job characteristics. *Journal of organizational behavior, 31*(2-3), 259–278. https://doi.org/10.1002/job.627

Pless, N. M., & Maak, T. (2006). Responsible leadership: An integrative review and future prospects. *Journal of Business Ethics*, *160*(4), 919–944. https://doi.org/10.1007/978-94-007-3995-6_2

Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, *88*(5), 879–903. https://doi.org/10.1037/0021-9010.88.5.879

Prochazka, J., Vaculik, M., Smutny, P., & Jezek, S. (2018). Leader traits, transformational leadership and leader effectiveness: A mediation study from the Czech Republic. *Journal of East European Management Studies*, *23*(3), 474–501. https://doi.org/10.5771/0949-6181-2018-3-474

Qing, M., Asif, M., Hussain, A., & Jameel, A. (2020). Exploring the impact of ethical leadership on job satisfaction and organizational commitment in public sector organizations: The mediating role of psychological empowerment. *Review of Managerial Science*, *14*, 1405–1432. https://doi.org/10.1007/s11846-019-00340-9

Quade, A., Wynn, M. G., & Dawson, D. (2020, September). Collaboration through virtual teams: towards an operational model for virtual project leadership in the automotive industry. In *COLLA 2020: The Tenth International Conference on Advanced Collaborative Networks, Systems and Applications* (pp. 1–7). ThinkMind (TM) Digital Library.

Ravitch, S. M., & Carl, N. M. (2016). *Qualitative research: Bridging the conceptual, theoretical, and methodological*. Sage.

Rego, A., Owens, B., Leal, S., Melo, A. I., Cunha, M. P., Gonçalves, L., & Ribeiro, P. (2017). How leader humility helps teams to be humbler, psychologically stronger, and more effective: A moderated mediation model. *The Leadership Quarterly*, *28*(5), 639–658. https://doi.org/10.1016/j.leaqua.2017.02.002

Resick, C. J., Hargis, M. B., Shao, P., & Dust, S. B. (2013). Ethical leadership, moral equity judgments, and discretionary workplace behavior. *Human Relations*, *66*(7), 951–972. https://doi.org/10.1177/0018726713481633

Rest, J. R. (1986). *Moral development: Advances in research and theory*. Praeger.

Riggio, R. E., Tucker, J. S., & Coffey, B. S. (2010). Enhancing leadership development through personality-based feedback. *Consulting Psychology Journal: Practice and Research*, *62*(4), 267–283. https://doi.org/10.1037/a0021896

Ruiz-Palomino, P., Linuesa-Langreo, J., & Elche, D. (2023). Team-level servant leadership and team performance: The mediating roles of organizational citizenship behavior and internal social capital. *Business Ethics, the Environment & Responsibility*, *32*(S2), 127–144. https://doi.org/10.1111/beer.12390

Saha, R., Roberto, S., Cerchione, R., Singh, R., & Dahiya, R. (2019). Effect of ethical leadership and corporate social responsibility on firm performance: A systematic review. *Corporate Social Responsibility and Environment Management*, *27*(2), 409–429. https://doi.org/10.1002/csr.1824

Salkind, N. J., & Frey, B. (2020). *Statistics for people who (think they) hate statistics* (7th ed.). Sage.

Samnani, M., Shahi, S., Samnani, M., Nanda, K., Srivastava, M., & Singh, P. (2021). Social inclusion of children diagnosed with autism spectrum disorder in India: A literature review. *European Journal of Special Education Research*, *7*(4). https://doi.org/10.46827/ejse.v7i4.4024

Sarros, J. C., Cooper, B. K., & Santora, J. C. (2008). Building a climate for innovation through transformational leadership and organizational culture. *Journal of leadership & Organizational Studies*, *15*(2), 145–158. https://doi.org/10.1177/1548051808324100

Sarros, J. C., Gray, J., & Densten, I. L. (2006). Leadership and its wider implications for organizational climate: A study of the relationship between leadership behavior and organizational climate. *Journal of Leadership & Organizational Studies*, *13*(1), 73–84. https://doi.org/10.1177/107179190701300106

Sarros, J. C., Luca, E., Densten, I., & Santora, C. (2014). Leaders and their use of motivating language. *Leadership & Organization Development Journal*, *35*(3), 226–240. https://doi.org/10.1108/lodj-06-2012-0073

Sarros, J. C., Tanewski, G. A., Winter, R. P., Santora, J. C., & Densten, I. L. (2006). Work alienation and organizational leadership. *International Journal of Human Resource Management*, *17*(4), 595–609. https://doi.org/10.1080/09585190600568757

Sarwar, H., Ishaq, M. I., Amin, A., & Ahmed, R. (2020). Ethical leadership, work engagement, employees' well-being, and performance: A cross-cultural comparison. *Journal of Sustainable Tourism*, *28*(12), 2008–2026. https://doi.org/10.1080/09669582.2020.1788039

Sawilowsky, S. S. (2009). New effect size rules of thumb. *Journal of Modern Applied Statistical Methods*, *8*(2), 597–599. https://doi.org/10.22237/jmasm/1257035100.

Schafer, J. L. (1999). Multiple imputation: A primer. *Statistical Methods in Medical Research*, *8*(1), 3–15. https://doi.org/10.1191/096228099671525676

Schafer, J. L., & Graham, J. W. (2002). Missing data: Our view of the state of the art. *Psychological Methods*, *7*(2), 147–177. https://doi.org/10.1037//1082-989x.7.2.147

Schaubroeck, J., & Lam, S. S. (2002). How similarity to peers and supervisor influences organizational advancement in different cultures. *Academy of management Journal*, *45*(6), 1120–1136. https://doi.org/10.5465/3069428

Sen, S., & Gocen, A. (2020). A psychometric evaluation of the ethical leadership scale using Rasch analysis and confirmatory factor analysis. *The Journal of General Psychology*, *148*(1), 84–104. https://doi.org/10.1080/00221309.2020.1834346

Sendjaya, S., Eva, N., Robin, M., Sugianto, L., ButarButar, I., & Hartel, C. (2019). Leading others to go beyond the call of duty: A dyadic study of servant leadership and psychological ethical climate. *Personnel Review*, *49*(2), 620–635. https://doi.org/10.1016/j.leaqua.2018.07.004

Shakeel, F., Kruyen, P. M., & Van Thiel, S. (2019). Ethical leadership as process: A conceptual proposition. *Public Integrity*, *21*(6), 613–624. https://doi.org/10.1080/10999922.2019.1606544

Sharma, N., & Chillakuri, B. K. (2023). Positive deviance at work: A systematic review and directions for future research, *Personnel Review*, *52*(4), 933–954. https://doi.org/10.1108/PR-05-2020-0360

Shin, D., & Kim, M. S. (2021). The mediating role of ethical leadership in the relationship between ethical climate and organizational citizenship behavior: A multilevel analysis. *Sustainability*, *13*(1), Article 423. https://doi.org/10.3390/su13010423

Sosik, J. J., & Cameron, J. C. (2010). Character and authentic transformational leadership behavior: Expanding the ascetic self toward others. *Consulting Psychology Journal: Practice and Research*, *62*(4), 251–269. https://doi.org/10.1037/a0022104

Sosik, J. J., Gentry, W. A., & Chun, J. U. (2012). The value of virtue in the upper echelons: A multisource examination of executive character strengths and performance. *Leadership Quarterly*, *23*(3), 367–382. https://doi.org/10.1016/j.leaqua.2011.08.010

Taamneh, M., Aljawarneh, N., Al-Okaily, M., Taamneh, A., & Al-Oqaily, A. (2024). The impact of ethical leadership on organizational citizenship behavior in higher education: The contingent role of organizational justice. *Cogent Business & Management*, *11*(1). https://doi.org/10.1080/23311975.2023.2294834

Tabachnick, B., & Fidell, L. (2007). *Using multivariate statistics* (5th ed.). Pearson Education.

Taber, K. S. (2018). The use of Cronbach's alpha when developing and reporting research instruments in science education. *Research in Science Education*, *48*, 1273–1296. https://doi.org/10.1007/s11165-016-9602-2

Tang, K. N. (2019). *Leadership and change management*. Springer.

Treviño, L. K., Brown, M., & Hartman, L. P. (2003). A qualitative investigation of perceived executive ethical leadership: Perceptions from inside and outside the executive suite. *Human Relations*, *56*(1), 5–37. https://doi.org/10.1177/0018726703056001445

Treviño, L. K., den Nieuwenboer, N. A., & Kish-Gephart, J. J. (2014). (Un)ethical behavior in organizations. *Annual Review of Psychology*, *69*, 123–148. https://doi.org/10.1146/annurev-psych-113011-143745

Treviño, L. K., Hartman, L. P., & Brown, M. (2000). Moral person and moral manager: How executives develop a reputation for ethical leadership. *California Management Review*, *42*(4), 128–142. https://doi.org/10.2307/41166055

Tu, Y., Lu, X., Choi, J. N., & Guo, W. (2019). Ethical leadership and team-level creativity: Mediation of psychological safety climate and moderation of supervisor support for creativity. *Journal of Business Ethics*, *159*, 551–565. https:doi.org/10.1007/s10551-018-3839-9

Wadei, K. A., Chen, L., Frempong, J., & Appienti, W. A. (2021). The mediation effect of ethical leadership and creative performance: A social information processing perspective. *The Journal of Creative Behavior*, *55*(1), 241–254. https://doi.org/10.1002/jocb.449

Walumbwa, F. O., Hartnell, C. A., & Misati, E. (2008). Does ethical leadership enhance group learning behavior? Examining the mediating influence of group ethical conduct, justice climate, and peer justice. *Journal of Applied Psychology*, *93*(4), 932–941. https://doi.org/10.1037/0021-9010.93.4.932

Walumbwa, F. O., & Schaubroeck, J. (2009). Leader personality traits and employee voice behavior: Mediating roles of ethical leadership and work group psychological safety. *Journal of Applied Psychology*, *94*(5), 1275. https://doi.org/10.1037/a0015848

Wang, G., & Hackett, R. D. (2016). Conceptualization and measurement of virtuous leadership: Doing well by doing good. *Journal of Business Ethics*, *137*, 321–345. https://doi.org/10.1007/s10551-015-2560-1

Wang, G., & Hackett, R. D. (2020). Virtues-centered moral identity: An identity-based explanation of the functioning of virtuous leadership. *The Leadership Quarterly*, *31*(5), Article 101421. https://doi.org/10.1016/j.leaqua.2020.101421

Wang, G., & Hackett, R. D. (2021). Virtuous leadership. In D. C. Poff & A. C. Michalos (Eds.) *Encyclopedia of business and professional ethics*. Springer. https://doi.org/10.1007/978-3-319-23514-1_1264-1

Wang, G., & Hackett, R. D. (2022). Virtuous leadership, moral behavior, happiness and organizational citizenship: The mediating effect of virtues-centered moral identity. *Leadership & Organization Development Journal*, *43*(7), 1047–1062. https://doi.org/10.1108/lodj-11-2021-0499

Weaver, G. R., Treviño, L. K., & Cochran, P. L. (2012). Corporate ethics practices in the mid-1990's: An empirical study of the Fortune 1000. *Journal of Business Ethics*, *188*(2), 331–347. https://doi.org/10.1007/978-94-007-4126-3_31

Wen, Q., Wu, Y., & Long, J. (2021). Influence of ethical leadership on employees' innovative behavior: The role of organization-based self-esteem and flexible human resource management. *Sustainability*, *13*(3), Article 1359. https://doi.org/10.3390/su13031359.

Yang, A. O. (2021). *The development and validation of a virtuous leadership scale.* [Unpublished Master's thesis, University of Cape Town].

Yukl, G., Mahsud, R., Hassan, S., & Prussia, G. E. (2013). An improved measure of ethical leadership. *Journal of Leadership & Organizational Studies*, *20*(1), 38–48. https://doi.org/10.1177/1548051812465898

Zhang, X., Wu, W., Zhang, Z., & Zhang, L. (2019). Development and validation of the ethical and virtuous leadership scale. *Frontiers in Psychology*, *10*(1719). https://doi.org/10.3389/fpsyg.2019.01719

Zhu, W., Zheng, X., He, H., Wang, G., & Zhang, X. (2019). Ethical leadership with both "moral person" and "moral manager" aspects: Scale development and cross-cultural validation. *Journal of Business Ethics*, *158*(2), 547–565. https://doi.org/10.1007/s10551-017-3740-y

Appendix A

IRB Approval

SOUTHEASTERN
UNIVERSITY

NOTICE OF APPROVAL FOR HUMAN RESEARCH

DATE: February 6, 2024

TO: Joshua Henson, Ty Wengler, Thomas Gollery

FROM: SEU IRB

PROTOCOL TITLE: Exploring the intersection of ethical and virtuous leadership: An analysis of correlation, influence.

FUNDING SOURCE: NONE

PROTOCOL NUMBER: 24 BE 02

APPROVAL PERIOD: Approval Date: February 6, 2024   Expiration Date: February 5, 2025

Dear Investigator(s),

The Institutional Review Board (IRB) for the protection of human subjects has reviewed the protocol entitled, Exploring the intersection of ethical and virtuous leadership: An analysis of correlation, influence. The project has been approved for the procedures and subjects described in the protocol pending the following change:
- Please add IRB contact information to the informed consent (irb@seu.edu).

Any changes require approval before they can be implemented as part of your study. If your study requires any changes, the proposed modifications will need to be submitted in the form of an amendment request to the IRB to include the following:

> Description of proposed revisions;
> *If applicable,* any new or revised materials;
> *If applicable,* updated letters of approval from cooperating institutions

If there are any adverse events and/or any unanticipated problems during your study, you must notify the IRB within 24 hours of the event or problem.

At present time, there is no need for further action on your part with the IRB.

This approval is issued under Southeastern University's Federal Wide Assurance 00006943 with the Office for Human Research Protections (OHRP). If you have any questions regarding your obligations under the IRB's Assurance, please do not hesitate to contact us.

Sincerely,

Dr. Rustin Lloyd
Chair, Institutional Review Board
irb@seu.edu

Appendix B

Print Form of Online Invitation and Consent

Virtuous and Ethical Leadership Survey Participant Consent Form

Researcher: Ty Wenglar

Study: Dissertation - Exploring the Intersection of Ethical and Virtuous Leadership: An Analysis of Correlation, Influence on Decision-Making, and Interchangeability of Measurement Tools.

Invitation:

You are invited to take part in a research survey at your convenience between February 15th and March 1st.

You were chosen for the research because you hold leadership positions in your respective organization, have direct reports, are responsible for leading and influencing others, and possess decision-making authority and managerial responsibilities. Please read this form and ask any questions you have before agreeing to be part of the interview.

This research is being conducted by a researcher named Ty Wenglar, who is a doctoral candidate at Southeastern University.

Background Information:

The purpose of this research is to evaluate the relationship between virtuous and ethical leadership and possible interchangeability of measurement instruments for ethical and virtuous leadership styles. This is being done in an effort to understand the relationship between virtuous and ethical leadership and the correlation and, possible interchangeability of measurement instruments for each as well as the effectiveness of each approach.

Procedures:

If you agree, you will be asked to participate in two online surveys, the total time estimated to complete the surveys is less than 3 minutes.

Voluntary Nature of the Research:

Your participation in this research is voluntary. This means that everyone will respect your decision of whether or not you want to participate. No one at

Southeastern University will treat you differently if you decide not to take the surveys.

Risks and Benefits of Being in the Interview:

There is the minimal risk of psychological stress during this research. If you feel stressed during the surveys, you may stop at any time. There are no benefits to you from participating in this interview.

Compensation:

There is no compensation for participating in this interview.

Confidentiality:

Any information you provide will be kept confidential. The researcher will not use your information for any purposes outside of this research. Also, your name or anything else that could identify is not recorded as a part of the survey.

Contacts and Questions:

The researcher's name is Ty Wenglar. The researcher's dissertation chair is Dr. Joshua Henson. You may ask any questions you have now. Or if you have questions later, you may contact the researcher via email at twenglar@seu.edu or the chair at jdhenson@seu.edu.

1. I have read the above information. I have received answers to any questions I have at this time. I am 18 years of age or older, and I consent to participate in the survey.

Yes

No

Appendix C

Print Form of Online Survey Qualification Statement

Page 2: Qualification Statement and Job Position

Virtuous and Ethical Leadership Survey Qualification Statement and Job Position

2. Do you hold a leadership position in your respective organization, have direct reports, are responsible for leading and influencing others, and possess decision- making authority and managerial responsibilities?

      Yes

      No

3. What is your position within your respective organization?

      Middle Management

      Senior Management

      Executive / C-Suite - reporting to a Board, Owner etc.

      Executive / Owner / C-Suite - reporting to no one.

Appendix D

Print Form of Online Virtuous Leadership Questionnaire

Page 3: Virtuous Leadership Questionnaire

Please think about the individual that you report to directly, i.e. your superior who manages you at work. If you are a CEO, President, etc who does not have an individual that you report to please think about yourself.

Consider each of the statements below and indicate the extent to which you believe that each statement is indicative of the way that your line-manager/supervisor typically thinks, feels or acts at work on a response scale where "1 = Strongly Disagree" and "5 = Strongly Agree".

Do not base your response on a unique event and/or situation. Also, do not think too long about your answers. There are no right or wrong answers.

My supervisor/manager:

* 4. acts with sustained initiative, even in the face of sacrificing personal risk.

1 - Strongly Disagree

2 - Disagree

3 - Neutral

4 - Agree

5 - Strongly Agree

* 5. speaks up on matters of injustice or personal conviction, despite risking a "backlash".

1 - Strongly Disagree

2 - Disagree

3 - Neutral

4 - Agree

5 - Strongly Agree

* 6. initiates a project despite risking their personal reputation.

1 - Strongly Disagree

2 - Disagree

3 - Neutral

4 - Agree

5 - Strongly Agree

* 7. leads fundamental change though it may entail personal sacrifice and/or personal risk.

1 - Strongly Disagree

2 - Disagree

3 - Neutral

4 - Agree

5 - Strongly Agree

* 8. expresses concern for everyone's needs.

1 - Strongly Disagree

2 - Disagree

3 - Neutral

4 - Agree

5 - Strongly Agree

* 9. expresses concern for the misfortune of others.

1 - Strongly Disagree

2 - Disagree

3 - Neutral

4 - Agree

5 - Strongly Agree

* 10. seeks/strive for the greater good.

1 - Strongly Disagree

2 - Disagree

3 - Neutral

4 - Agree

5 - Strongly Agree

* 11. people become better after interacting with him/her.

1 - Strongly Disagree

2 - Disagree

3 - Neutral

4 - Agree

5 - Strongly Agree

*** 12. is open to the ideas and advice of others.

1 - Strongly Disagree

2 - Disagree

3 - Neutral

4 - Agree

5 - Strongly Agree

*** 13. acknowledges when others are more competent.

1 - Strongly Disagree

2 - Disagree

3 - Neutral

4 - Agree

5 - Strongly Agree

*** 14. admits when they do not know how to do something.

1 - Strongly Disagree

2 - Disagree

3 - Neutral

4 - Agree

5 - Strongly Agree

*** 15. is open to learning from others.

1 - Strongly Disagree

2 - Disagree

3 - Neutral

4 - Agree

5 - Strongly Agree

*** 16. delivers on promises.

1 - Strongly Disagree

2 - Disagree

3 - Neutral

4 - Agree

5 - Strongly Agree

* 17. practices what they preach.

1 - Strongly Disagree

2 - Disagree

3 - Neutral

4 - Agree

5 - Strongly Agree

* 18. does the right thing even when it would be unpopular.

1 - Strongly Disagree

2 - Disagree

3 - Neutral

4 - Agree

5 - Strongly Agree

* 19. stands by principles no matter the price.

1 - Strongly Disagree

2 - Disagree

3 - Neutral

4 - Agree

5 - Strongly Agree

* 20. acts as a role model.

1 - Strongly Disagree

2 - Disagree

3 - Neutral

4 - Agree

5 - Strongly Agree

* 21. allocates valuable resources in a fair/equitable manner.

1 - Strongly Disagree

2 - Disagree

3 - Neutral

4 - Agree

5 - Strongly Agree

* 22. balance individual interests and rights fairly when allocating responsibilities.

1 - Strongly Disagree

2 - Disagree

3 - Neutral

4 - Agree

5 - Strongly Agree

* 23. resolves conflict fairly and objectively.

1 - Strongly Disagree

2 - Disagree

3 - Neutral

4 - Agree

5 - Strongly Agree

* 24. keeps people informed at all times.

1 - Strongly Disagree

2 - Disagree

3 - Neutral

4 - Agree

5 - Strongly Agree

* 25. involves people in the decisions that affect them.

1 - Strongly Disagree

2 - Disagree

3 - Neutral

4 - Agree

5 - Strongly Agree

* 26. exercises sound reasoning in deciding on the optimal course of action with consideration of the associated risks.

1 - Strongly Disagree

2 - Disagree

3 - Neutral

4 - Agree

5 - Strongly Agree

* 27. makes the right decisions for the right reasons at the right time.

1 - Strongly Disagree

2 - Disagree

3 - Neutral

4 - Agree

5 - Strongly Agree

* 28. grasps the complexity of most situations when making decisions/judgments.

1 - Strongly Disagree

2 - Disagree

3 - Neutral

4 - Agree

5 - Strongly Agree

* 29. optimizes resources in responding to the demands of the environment.

1 - Strongly Disagree

2 - Disagree

3 - Neutral

4 - Agree

5 - Strongly Agree

* 30. avoids indulging in personal work desires/preferences at the expense of others.

1 - Strongly Disagree

2 - Disagree

3 - Neutral

4 - Agree

5 - Strongly Agree

* 31. prioritizes the team and/or organization's interests over self-interest.

1 - Strongly Disagree

2 - Disagree

3 - Neutral

4 - Agree

5 - Strongly Agree

* 32. behaves unselfishly.

1 - Strongly Disagree

2 - Disagree

3 - Neutral

4 - Agree

5 - Strongly Agree

Appendix E

Print Form of Online Ethical Leadership Scale

Page 4: Ethical Leadership Scale

Consider each of the statements below and indicate the extent to which you believe that each statement is indicative of the way that your line-manager/supervisor typically thinks, feels or acts at work on a response scale where "1 = Strongly Agree" and "5 = Strongly Agree".

Do not base your response on a unique event and/or situation. Also, do not think too long about your answers. There are no right or wrong answers.

My line-manager/supervisor:

* 33. Listens to what employees have to say.

1 - Strongly Disagree

2 - Disagree

3 - Neutral

4 - Agree

5 - Strongly Agree

* 34. Disciplines employees who violate ethical standards.

1 - Strongly Disagree

2 - Disagree

3 - Neutral

4 - Agree

5 - Strongly Agree

* 35. Conducts his/her personal life in an ethical manner.

1 - Strongly Disagree

2 - Disagree

3 - Neutral

4 - Agree

5 - Strongly Agree

* 36. Has the best interests of employees in mind.

1 - Strongly Disagree

2 - Disagree

3 - Neutral

4 - Agree

5 - Strongly Agree

* 37. Makes fair and balanced decisions.

1 - Strongly Disagree

2 - Disagree

3 - Neutral

4 - Agree

5 - Strongly Agree

* 38. Can be trusted.

1 - Strongly Disagree

2 - Disagree

3 - Neutral

4 - Agree

5 - Strongly Agree

* 39. Discusses ethics or values with employees.

1 - Strongly Disagree

2 - Disagree

3 - Neutral

4 - Agree

5 - Strongly Agree

* 4. Sets an example of how to do things the right way in terms of ethics.

1 - Strongly Disagree

2 - Disagree

3 - Neutral

4 - Agree

5 - Strongly Agree

* 41. Defines success not just by results, but also the way they are obtained.

1 - Strongly Disagree

2 - Disagree

3 - Neutral

4 - Agree

5 - Strongly Agree

* 42. When making decisions, asks "What is the right thing to do?"

1 - Strongly Disagree

2 - Disagree

3 - Neutral

4 - Agree

5 - Strongly Agree