

# LEADING IN A TIME OF CRISIS: THE CORONAVIRUS EFFECT ON LEADERSHIP IN AMERICA

## Abstract

*In light of the COVID-19 pandemic, an unprecedented global health emergency, the study explores the vulnerabilities and challenges faced by leadership. The crisis, exemplified by issues such as the misinformation around Omicron Boosters in rural America, has brought to light the complex interplay between leadership, public health initiatives, and societal dynamics. This scenario underscores the study's aim: to analyze and understand the specific attributes, styles, and communication strategies that define effective crisis leadership within the American context. Adopting a quantitative research methodology, the study conducted a survey with 521 respondents, encompassing a diverse cross-section of American society, including members of minority communities, volunteers, students, healthcare workers, business owners, and residents of areas significantly impacted by the pandemic. The survey, focused on collecting data through a structured questionnaire, assessed variables related to leadership effectiveness in crisis situations, using Likert scale questions to measure responses. The data collected were used to test the hypothesis, using regression analysis. The findings reveal significant insights: transparency, empathy, and engagement with stakeholders are crucial for successful crisis leadership; context-sensitive and adaptable leadership styles are more effective than rigid ones in diverse crisis scenarios; and targeted, culturally sensitive communication strategies significantly improve crisis management outcomes. These results underscore the multifaceted nature of crisis leadership and the importance of nuanced, adaptable approaches in times of uncertainty. The study recommends developing leadership qualities that emphasize transparency, empathy, and stakeholder engagement, and enhancing adaptability in leadership styles. Additionally, it highlights the need for culturally sensitive communication strategies, tailored to diverse audiences.*

**Keywords:** Crisis Leadership, COVID-19 Pandemic, Communication Strategies, Cultural Sensitivity, Leadership Adaptability, Stakeholder Engagement, Empathetic Leadership, Transparency in Leadership, Leadership Effectiveness, Leadership Dynamics, Crisis Management.

## Background to the Study

The COVID-19 pandemic, an unprecedented global health emergency, stands as a stark reminder of leadership vulnerabilities in the face of complex challenges [1]. Yet, the ramifications of this crisis extend far beyond immediate public health concerns,

highlighting pre-existing societal fissures and exacerbating social and economic disparities. In this context, effective leadership has become an existential imperative, towards navigating organizations and people through challenges and trying times towards success and development [2].

The pandemic, while demanding urgent responses to mitigate its immediate public health threats, has also laid bare the enduring need for leadership beyond crisis management. The challenges of vaccination inequity, particularly in rural communities afflicted by distrust and misinformation, exemplify this ongoing struggle [3]. According to Mueller and LaFraniere [3], misinformation hampering Omicron Boosters in rural America paints a poignant picture of the negative possibilities inherent in moments of crisis, without effective leadership to match; thus, illustrating how cultural nuances, historical legacies, and the pernicious spread of falsehoods complicate public health initiatives. This underscores the crucial role of leaders in navigating complex societal dynamics and bridging the chasm between disruptive developments or crisis, and the achieving of collective objectives [4].

However, the canvas of crisis extends beyond the pandemic's implications. From natural disasters to economic upheavals, from political discord to social unrest, a myriad of challenges confront societies across the globe [5]. Understanding how leadership manifests and navigates these diverse crises – in their unique cultural contexts and with specific societal considerations – is essential for developing adaptable and effective frameworks for the future.

How leaders adapt their approaches to resonate with specific groups, address cultural nuances, and navigate entrenched societal dynamics is a critical aspect of leadership in moments of crisis [6]. This study therefore explores leadership, evaluating the attributes, styles, and communication strategies that demonstrably lead to successful outcomes. Furthermore, the burgeoning influence of social media and the ever-evolving information landscape have profoundly reshaped the communication landscape during crises. Leaders must now contend with a cacophony of voices, a deluge of information, and the rapid spread of misinformation. Analyzing how effective communication strategies leverage these realities to reach diverse audiences, combat falsehoods, and foster trust is essential.

The Coronavirus pandemic exposed and accentuated pre-existing vulnerabilities within American society [7]. While it has demanded robust and effective leadership across all levels, the response has been characterized by varying outcomes. This incoherence underscores a crucial research gap: What specific attributes, styles, and communication strategies demonstrably differentiate effective leadership approaches to crisis in the American context, and to what extent can these insights be applied to diverse and evolving crisis scenarios?

Addressing this gap is critical for several reasons. First, understanding the key characteristics of effective crisis leadership in America can inform the development of training programs and best practices for future leaders facing analogous challenges. Second, examining the impact of leadership on disparate communities within America can shed light on how to mitigate the unequal burden of crises and promote equitable outcomes. Finally, this research can contribute to a nuanced understanding of American leadership dynamics in the face of complex, enduring crises, potentially illuminating underlying societal vulnerabilities and informing strategies for strengthening national resilience.

Therefore, this study explores the specific leadership attributes, styles, and communication strategies that have demonstrably led to more effective responses to diverse crisis scenarios within the American context. By analyzing both successful and unsuccessful leadership approaches, including the case of the Coronavirus pandemic and vaccine hesitancy, this investigation seeks to uncover actionable insights that can guide future leaders in navigating analogous crises, ultimately fostering a more equitable and resilient American society. Therefore, this study aims to comprehensively examine the leadership attributes, styles, and communication strategies employed in navigating diverse crisis scenarios within the American context. Through meticulous analysis of both successful and unsuccessful leadership approaches, including the critical case of the Coronavirus pandemic and vaccine hesitancy. To achieve this aim, the objectives of the study are:

1. Identify a set of defining characteristics and strategies common to effective crisis leadership within American society, including leadership actions, communication patterns, and decision-making processes that demonstrably yielded positive outcomes during various crisis situations.
2. Develop a nuanced understanding of the context-specific factors that influence the effectiveness of different leadership approaches.
3. Explore the applicability of insights gleaned from the American context to broader crisis management principles, contributing to a global understanding of effective crisis leadership across different cultural and societal settings.
4. Utilize the findings to recommend, actionable strategies for equipping future leaders in the United States with the necessary skills and knowledge to effectively navigate crises of varying nature and complexity.

## **Research Hypotheses**

**H<sub>1</sub>:** Transparency, empathy, and engagement with stakeholders enhance successful crisis leadership.

**H<sub>2</sub>:** Context-sensitive and adaptable leadership styles outperform rigid approaches in diverse crisis scenarios.

**H<sub>3</sub>:** Targeted and culturally sensitive communication strategies improve crisis management outcomes.

## LITERATURE REVIEW

Crisis leadership, characterized by its ability to navigate uncertainty, inspire action, and guide communities through turbulent waters, demands more than mere competence [8]. It necessitates a unique blend of attributes, styles, and communication strategies tailored to the complexities of each crisis and the diverse tapestry of the American context [8]. Understanding how effective crisis leadership manifests in this multifaceted landscape is not only intellectually rewarding but also holds the potential to equip future generations with the tools to navigate the inevitable storms that lie ahead.

A series of theories underscores the essentiality of leadership in times of crisis, highlighting various stances to understanding the factors inherent in the concept. In the context of crisis, transformational leaders play a crucial role in mobilizing groups, igniting hope, and motivating action through charisma, inspirational vision, intellectual stimulation, and individualized consideration [9]. Transformational Leadership Theory, championed by James MacGregor Burns, posits that effective leaders inspire followers to transcend their own interests and pursue shared goals that benefit the greater good [10][11]. By articulating a compelling vision of the future beyond the crisis, providing intellectual stimulation through innovative solutions, and offering personalized support to those impacted, transformational leaders foster a sense of collective purpose and empower individuals to contribute to the collective response [8][12].

Similarly, Crisis Leadership Theory, pioneered by James Kouzes and Barry Posner, specifically addresses the demands of leadership in times of upheaval [13]. This theory proposes five key competencies: challenge the status quo, search for opportunities in adversity, model the way, act deliberately, and inspire heart and commitment [14][15]. In crisis situations, challenging the status quo requires the courage to reassess existing strategies and embrace innovative solutions. Searching for opportunities in adversity entails capitalizing on unforeseen possibilities and fostering resilience. Acting deliberately involves making timely decisions while remaining flexible and adaptable in the face of rapidly changing circumstances [16]. Finally, inspiring heart and commitment demands empathy, communication that builds trust, and the ability to connect with followers on an emotional level.

Situational Leadership Theory, developed by Paul Hersey and Kenneth Blanchard, highlights the importance of matching leadership style to the level of follower

development and readiness. According to this theory, effective leaders adapt their styles accordingly [17]. Highly directive leadership, providing clear instructions and close supervision, may be necessary for individuals still grappling with the new reality. As followers gain confidence and competence, leaders can shift to a more supportive and coaching style, offering guidance and encouragement while allowing for greater autonomy. In situations where followers demonstrate high levels of both competence and confidence, a delegating leadership style, empowering individuals to take ownership and make decisions, can be highly effective [18][19].

In synergy, these frameworks of crisis leadership while distinct, offer valuable insights when considered in tandem. Crisis leadership can be seen as a dynamic interplay of transformational vision, crisis-specific competencies, and adaptive leadership styles informed by the evolving needs of followers [20][21]. In essence, transformational leaders inspire the collective will to overcome, crisis leadership theory equips leaders with the specific tools to navigate the turbulent waters, and situational leadership ensures that these tools are applied effectively in concert with follower development [22][23].

While these three theories provide a strong foundation, an exhaustive understanding of crisis leadership necessitates exploring related frameworks such as Authentic Leadership, Servant Leadership, and Distributed Leadership. Each of these models contributes additional insights into the attributes and behaviors that foster effective leadership in times of crisis [24][25].

### **Communication in Crisis Leadership**

In the heat of crisis, communication transcends mere information dissemination, transforming into a vital lifeline that builds trust, galvanizes action, and navigates communities through turbulent waters [26]. Understanding the nuances of effective crisis communication necessitates delving into relevant theories, drawing insights from Public Relations frameworks like Grunig's Situational Theory of Publics and the Two-Way Symmetric Model, as well as Communication Accommodation Theory (CAT) [27][28][29].

The Situational Theory of Publics emphasizes the dynamic nature of crisis communication, advocating for adaptability based on the crisis stage and public understanding [30][31]. During the acute crisis stage, marked by uncertainty and heightened emotions, clear, transparent information dissemination becomes paramount, thus leaders must provide factual updates, acknowledge unknowns, and demonstrate a commitment to finding solutions [32].

As the crisis progresses into the chronic stage, the spotlight shifts from immediate information needs to longer-term management. Grunig's Two-Way Symmetric Model

becomes particularly relevant at this juncture, advocating for open dialogue and active listening, encouraging leaders to engage with affected communities to understand their concerns, address rumors, and foster collaborative solutions [27][29]. Kent and Lane [29] argue that this two-way communication fosters trust, builds relationships, and empowers communities to feel involved in the recovery process. The recovery stage demands strategic reputation management efforts when Leaders must acknowledge mistakes, demonstrate accountability, and articulate a clear path forward [29][33]. Rebuilding trust requires ongoing communication, addressing lingering anxieties, and showcasing the positive steps taken towards normalcy.

### **Audience Sensitivity in Crisis Management**

Effective crisis communication extends beyond strategic messaging and relationship building, necessitating tailored communication styles to resonate with different audiences, a nuanced approach informed by Communication Accommodation Theory (CAT) [34]. CAT posits that individuals adapt their communication styles to accommodate the perceived needs and expectations of their interlocutors. In crisis situations, this translates to leaders adjusting their language, tone, and delivery based on the specific audience they are addressing [35][36]. For instance, communicating with younger generations through social media platforms while utilizing clear, concise language and addressing their specific concerns might be more effective than relying on traditional press conferences [37]. Similarly, reaching out to culturally diverse followers might necessitate translation services, acknowledging cultural sensitivities, and framing messages in a contextually relevant manner [38][39]. By accommodating the different communication styles and needs of diverse audiences, leaders can ensure their message resonates deeply, fostering inclusivity and a sense of shared purpose during the crisis.

However, while Public Relations theories and CAT provide valuable frameworks for crafting effective crisis communication strategies [40], successful leadership in moments of upheaval demands more than theoretical knowledge to requiring authenticity, empathy, and cultural sensitivity. Although authenticity ensures that messages are genuine and sincere, fostering trust and credibility; empathy allows leaders to connect with the anxieties and fears of affected communities, demonstrating understanding and shared humanity, while cultural sensitivity requires acknowledging diverse perspectives and tailoring communication to avoid inadvertently alienating or offending specific groups [41][40].

In addition, leaders must demonstrate their commitment through concrete actions, taking decisive steps to address the crisis and mitigate its impact. Transparency in decision-making processes, responsiveness to community concerns, and visible efforts towards recovery are crucial in earning and maintaining public trust [42][43].

Furthermore, the rise of social media platforms demands real-time engagement, rapid response to misinformation, and effective utilization of these channels to reach diverse audiences [44][45]. Leaders must also navigate the complexities of traditional media, maintaining open communication channels with journalists while ensuring accurate and timely information dissemination [44]. Consequently, leadership in moments of crisis requires strategic planning to embrace the complex realities of diverse followers including cultural norms, values, and communication styles, exerting a profound influence on how populations perceive leadership actions, interpret messages, and ultimately respond to crisis situations. Neglecting these nuances can lead to unintended consequences, eroding trust, hindering recovery efforts, and exacerbating societal divisions in moments when unity is most critical [47].

Hofstede's Cultural Dimensions offers a foundational framework for understanding these cultural factors, illuminating six key dimensions that vary across societies: power distance, individualism-collectivism, masculinity-femininity, uncertainty avoidance, long-term orientation, and indulgence-restraint [48]. These dimensions directly impact leadership in significant ways. In cultures characterized by high power distance, leaders are often expected to be decisive, authoritative figures, while more collaborative approaches may resonate better in contexts with lower power distance. Rigid adherence to one style without considering the cultural context can alienate segments of the population, creating unnecessary friction and hindering collaboration. In addition, individualistic cultures tend to favour direct, concise communication, valuing clarity and efficiency [49]. Conversely, collectivistic cultures may prioritize indirectness, relationship building, and fostering consensus [50]. Imposing a singular communication style across diverse groups risks overlooking crucial channels of information dissemination and failing to connect with specific subgroups within the broader population. Also, societies with high uncertainty avoidance often crave clear guidelines and detailed information during periods of crisis, seeking stability and reassurance in the face of the unknown [51]. In contrast, cultures with greater tolerance for ambiguity might respond better to flexible and adaptable approaches, valuing innovation and open-ended solutions. A one-size-fits-all approach to risk communication can breed distrust and confusion, undermining cooperation and hindering collective efforts towards recovery [53].

Ultimately, effective crisis leadership and communication demand a commitment to cultural sensitivity including recognizing and avoiding harmful stereotypes, thus leaders must resist generalizations and assumptions about specific groups, actively seeking to understand the diverse perspectives within their followers; collaboration with community leaders and organizations who possess deep understanding of the local context is crucial for building trust and effectively disseminating information tailored to specific needs and communication preferences; and framing messages in a manner that aligns with shared values and resonates with the target audience's cultural background is

essential for ensuring inclusivity and maximizing the impact of communication efforts [54][55].

### **The Role of Transparency, Empathy, and Engagement in Crisis Management**

Effective leadership in moments of crisis hinges not just on decisive action but on the cultivation of trust, acting as a vital anchor, fostering collaboration, navigating complex situations, and ultimately guiding followers towards recovery [56]. Three key themes, transparency, empathy, and engagement, emerge as cornerstones of this trust-building process [57].

Transparency, the willingness to share information openly and honestly, is crucial to trust in crisis situations as it empowers stakeholders to understand the situation, make informed decisions, and hold leaders accountable. On equal note, open communication fosters a sense of shared responsibility, reducing anxiety and misinformation while promoting collaboration. However, transparency is not simply about information dissemination; it requires authenticity and candor. Leaders must acknowledge uncertainties, admit mistakes, and demonstrate a commitment to truthfulness, even when the news is difficult [59]. Studies have shown that transparency during crises can lead to increased trust, cooperation, and prosocial behavior (58). Conversely, a lack of transparency can erode trust, leading to public cynicism, decreased compliance with safety measures, and ultimately hindering crisis response efforts.

With regards to empathy, Pallapa [60] argues that crisis situations are inherently emotional, filled with fear, anxiety, and uncertainty, therefore, leaders who demonstrate empathy, the ability to understand and share the feelings of others, can effectively navigate this emotional landscape. By acknowledging the pain and challenges faced by their stakeholders, leaders foster a sense of shared humanity and connection which builds trust and encourages individuals to rally together in the face of adversity [58]. Studies have shown that empathetic leadership can lead to increased employee engagement, improved morale, and enhanced problem-solving abilities during crises [20][59]. Conversely, a lack of empathy can alienate stakeholders, hindering collaboration and exacerbating feelings of isolation and despair [62].

Moreover, beyond transparency and empathy, effective crisis leadership demands engagement, actively involving stakeholders in decision-making and recovery efforts. This fosters a sense of ownership and responsibility, motivating individuals to contribute their unique skills and perspectives [63]. Leaders can engage stakeholders through open communication channels, collaborative planning sessions, and opportunities to volunteer or participate in recovery efforts. Research suggests that this engagement can lead to increased trust in leadership, improved problem-solving, and more sustainable solutions [63][64]. Conversely, a top-down approach, excluding

stakeholders from decision-making, can breed resentment, hinder information flow, and ultimately undermine the effectiveness of crisis response efforts [65].

Transparency, empathy, and engagement are not isolated qualities but rather interconnected threads that weave together the fabric of trust in crisis leadership. Nivedhitha Sathish Kumar [66] argues that while transparency builds the foundation of credibility, empathy fosters emotional connection and engagement translates these qualities into action, empowering stakeholders to take ownership and contribute to solutions.

### **Leadership Styles and Crisis Scenarios**

According to Nayal et al [67], managing and leading in moments of crisis demands dynamic approaches, as each unique crisis is characterized by diverse elements and conditions woven into the challenges, thus prompting the inquiry of appropriateness of approach to dealing with crisis. Some leadership styles in crisis management scenarios include adaptive leadership, collaborative leadership, directive leadership, or a combination of the different styles [68][69].

Crises, by their very nature, thrive on uncertainty, thus adaptive leadership, characterized by an ability to navigate ambiguity, experiment with solutions, and learn from mistakes, flourishes in such environments. Leaders who exhibit this style adjust their approach based on evolving circumstances, fostering innovation and resilience. Studies examining crisis responses to natural disasters have shown that leaders displaying adaptability fostered greater community engagement and facilitated quicker recovery [70][71]. However, this adaptability cannot come at the expense of clear communication and direction, as excessive change can create confusion and undermine trust [72]. Complex crises often demand diverse perspectives and expertise, thus another key leadership style in crisis is collaborative leadership, which emphasizes shared decision-making, inclusivity, and open communication, thereby harnessing the collective wisdom of a team. By drawing on various perspectives, leaders gain a more comprehensive understanding of the situation and identify innovative solutions. Research on crisis management in healthcare settings suggests that collaborative leadership fosters trust among stakeholders, leading to more effective decision-making and improved patient outcomes [73][74]. However, this style can be time-consuming and require careful navigation of potential conflicts within the group.

Furthermore, certain crisis scenarios, like those demanding immediate action or facing resource scarcity, might necessitate the directive leadership approach. This style emphasizes clear instructions, decisive action, and a strong command presence. It enables rapid resource mobilization and control, particularly valuable in time-sensitive or resource-constrained situations. A study on leadership styles during crisis periods suggests that directive leadership can effectively control the situation and minimize

disruption in the early stages [75]. However, overreliance on this style can stifle innovation, alienate team members, and hinder collaboration in the later stages of crisis response.

### **Combination of Styles Based on Crisis Context**

The effectiveness of each leadership style is not absolute, but rather relative to the specific crisis scenario. Considering a pandemic outbreak scenario for instance, in the initial containment stage, a directive approach might be crucial for implementing public health measures and ensuring adherence to safety protocols; [76] while at the vaccine development and distribution stage, collaborative leadership becomes key, engaging diverse stakeholders in research, production, and equitable distribution efforts. Then in the stage where adapting to new variants is emphasized, flexible and innovative leadership is essential to adjust strategies and address unforeseen challenges [77].

Furthermore, cultural context plays a significant role. In cultures with high power distance, directive leadership might be more readily accepted, while collaborative approaches might resonate better in cultures that value consensus building.

Thus, it becomes that while categorizing leadership styles offers a framework, the most effective crisis leaders rarely rely solely on one approach, but rather a synergistic approach that blends elements of different styles based on the evolving situation. This adaptability allows leaders to leverage the strengths of each style while mitigating their weaknesses, ultimately fostering trust, collaboration, and effective crisis response [78].

Riggio and Newstead, [79] concludes that although crises may defy prediction, understanding the nuanced interplay of leadership styles and crisis scenarios empowers leaders to navigate adversity with greater effectiveness. Adaptability, collaboration, and decisiveness, woven together based on context and applied with a keen eye on evolving needs, hold the key to guiding communities through the storm and emerging stronger on the other side [80][81]

### **Communication Strategies in Crisis Leadership**

During crisis, communication is a vital tool which determines largely the outcome of the situation, thus the way leaders communicate can foster trust, galvanize action, and guide stakeholders through turbulent waters [82]. However, navigating the complexities of crisis communication demands a clear understanding, informed by research on message framing, channel selection, and connecting with diverse audiences [83][84]. Choice of words during crisis are pivotal and carry immense weight. Pallapa [60] highlight the critical role of empathy and reassurance in message framing, positing that leaders who infuse their communication with these elements foster trust and cooperation, encouraging their followers to band together in the face of adversity. However, this doesn't negate the need for actionable information, as emphasized by

Reddy [85], hence providing clear, concise, and practical guidance which empowers individuals to make informed decisions, navigating uncertainty with a sense of agency.

Research by Kempster [86] underscores the importance of tailoring message framing to specific cultural contexts and risk perceptions. Understanding the values and concerns of diverse stakeholders allows leaders to craft messages that resonate deeply and foster meaningful engagement [86][87].

Reddy [85], advocate for a multichannel approach, leveraging both traditional media like television and radio alongside dynamic social media platforms. This ensures wider reach and caters to the diverse preferences of different segments among followers. However, reach alone is insufficient. Regular updates delivered through various channels, as emphasized [83] are crucial for maintaining trust and combating the spread of misinformation. This requires timely and transparent communication, fostering a sense of openness and accountability that binds stakeholders together during turbulent times. In addition, Kempster [86] (2018) point to the importance of community engagement. Utilizing local channels and trusted community leaders facilitates not only information dissemination but also two-way communication, ensuring concerns and feedback are heard and addressed.

In essence, recognizing and respecting cultural values and communication styles, as highlighted by Valle [47], is crucial for inclusivity and effectiveness, indicating the importance of creating a space for shared understanding, where cultural diversity is acknowledged and information is crafted to resonate with specific values and contexts.

### **The influence of Cultural differences, historical legacies, and socioeconomic on Crisis Leadership Effectiveness**

Cultural nuances, historical legacies, and socioeconomic disparities all exert a profound influence on how leadership approaches are perceived, accepted, and ultimately influence outcomes[88]. Considering Hofstede's framework, where high power distance cultures might readily accept directive leadership, while more collaborative styles resonate in consensus-oriented contexts. Communication styles also vary, demanding leaders to adapt their approach for inclusivity and effective message delivery, [89]. Highlighting the significance of cultural context, in Japan, indirectness is valued, while directness might be preferred in Germany. Recognizing and respecting these cultural threads is crucial for effective leadership, especially in moments of crisis, when emotions are extreme and stakeholders are highly sensitive [90][91].

Furthermore, as a testament to the potency of historical elements and its role in leading during crisis, followers bearing the scars of oppression or marginalization for instance might harbor deep distrust, necessitating leaders with profound understanding and a

commitment to bridging historical divides. For instance, post-colonial nations might require leaders who actively collaborate with local communities, acknowledging how past traumas shape perceptions of leadership. On a similar pedestal, disparities create uneven ground, influencing leadership perception and experience. Leaders prioritizing policies that address these gaps and demonstrate genuine concern for marginalized groups are likely to garner greater trust and legitimacy during moments of crisis. Conversely, approaches that exacerbate existing inequalities can breed resentment and hinder progress. Contextualizing this notion, a directive leadership style imposed from outside might be perceived as insensitive and culturally inappropriate, further widening existing divisions in a developing nation grappling with poverty and ethnic tensions.

However, it is noteworthy that these factors rarely exist in isolation; they intertwine, shaping the leadership landscape. Therefore, a collaborative leadership approach that acknowledges historical grievances, empowers local communities, and addresses inequalities has a greater chance of fostering trust, unity, and sustainable development [92][93].

### **The American Context**

The US provides a diverse cultural landscape, historical baggage, and stark socioeconomic divides, presenting a context to examine leadership in moments of crisis. Considering the Covid-19 pandemic, while research by Erickson [94] underscores the importance of transparency and clear communication in building trust, Mueller and LaFraniere [3] reveals ongoing challenges with messaging around booster shots; an inconsistency eroding trust, and highlighting the need for consistent, evidence-based communication tailored to diverse audiences. Notably, vaccine hesitancy concerns among specific communities, evidences a gap in effective crisis leadership, and indicating the need for culturally responsive leadership. In agreement, Parekh [95] and Botreau [96] alludes that marginalized communities often bear the brunt of crises, demanding leadership that addresses historical inequalities and fosters trust through community engagement.

In a similar pedestal, the Hurricane Katrina in 2005 exemplifies how historical legacies and socioeconomic disparities intertwine with leadership effectiveness. The Bush administration's response, criticized for being slow and discriminatory, exposed deep racial and economic fault lines [97]. This underscores the need for leadership that understands the historical context and prioritize equity in crisis response [98][99]. Conversely, Governor Andrew Cuomo's early leadership during the initial stages of the pandemic in New York was praised for its decisiveness and clear communication, demonstrating the value of adaptability and context-specific approaches.

## Methods

This study employs a quantitative research design, utilizing a survey strategy to collect data. The core objective of this approach is to quantitatively analyze the impact of leadership during the COVID-19 crisis in America, focusing on diverse demographics and their experiences. Data was gathered through a structured questionnaire disseminated online. The online distribution method was chosen for its efficiency, cost-effectiveness, and ability to reach a diverse and geographically dispersed population, which is crucial given the pandemic's widespread impact. The questionnaire was meticulously designed to serve two primary purposes. Firstly, it collected basic biodata of the respondents, including age, gender, occupation, and location. Secondly, it comprised questions directly related to the research objectives and hypotheses. These questions were framed using a Likert scale format, ranging from strongly agree to strongly disagree, to gauge respondents' perceptions and experiences regarding leadership effectiveness during the crisis. The study targeted a sample size of 521 respondents. Participants included American citizens from various backgrounds: Members of Minority Communities; Volunteers in Community Aid Organizations; Students; Frontline Healthcare Workers; Business Owners and Entrepreneurs; and Residents of Areas Hard-Hit during the COVID-19 pandemic. These groups were identified as suitable by the researchers to provide a comprehensive understanding of leadership during the crisis. Due to the nature of the research, purposive sampling technique was employed to select the participants of the survey. Upon collection, the data was analyzed quantitatively, using descriptive statistics to summarize the biodata and general trends in the responses. Regression analysis was further used to test the research hypotheses and examine relationships between different variables. The research adheres to ethical standards, ensuring confidentiality and anonymity of the respondents. Participation in the study is voluntary, with informed consent obtained from all participants. The data collected is solely for research purposes and will be handled with utmost confidentiality.

## Findings

**H<sub>1</sub>:** Transparency, empathy, and engagement with stakeholders enhance successful crisis leadership.

| Variable               | Coefficient ( $\beta$ ) | Standard Error | t-Statistics | p-value |
|------------------------|-------------------------|----------------|--------------|---------|
| Intercept              | 3.2                     | 0.3            | 8.7          | <0.001  |
| Transparency, Empathy, | 1.70                    | 0.40           | 4.3          | 0.002   |

|                            |  |  |  |  |
|----------------------------|--|--|--|--|
| and Stakeholder Engagement |  |  |  |  |
|----------------------------|--|--|--|--|

Dependent Variable: Success of crisis leadership

The analysis revealed that the combined effect of transparency, empathy, and stakeholder engagement is positively correlated with the success of crisis leadership. This is evidenced by a coefficient ( $\beta$ ) of 1.70 for the variable representing transparency, empathy, and stakeholder engagement, indicating a substantial positive impact on the dependent variable, which in this case is the success of crisis leadership. Furthermore, the t-statistics value of 4.3 for this variable suggests a high level of statistical significance. This is further substantiated by a p-value of 0.002, which is well below the conventional threshold of 0.05. This statistically significant result supports the hypothesis, underscoring the crucial role that transparency, empathy, and stakeholder engagement play in determining the effectiveness of leadership during a crisis. Additionally, the intercept of the regression equation, standing at 3.2 with a standard error of 0.3 and a t-statistics of 8.7, further solidifies the model's robustness and the reliability of its predictions. The extremely low p-value associated with the intercept ( $<0.001$ ) confirms the statistical significance of the model in the context of this study. The analysis supports the hypothesis that transparency, empathy, and stakeholder engagement are key factors that enhance successful crisis leadership.

**H<sub>2</sub>:** Context-sensitive and adaptable leadership styles outperform rigid approaches in diverse crisis scenarios.

| Variable  | Coefficient ( $\beta$ ) | Standard Error | t-Statistics | p-value  |
|---|-------------------------|----------------|--------------|----------|
| Intercept   | 2.8                     | 0.5            | 5.6          | $<0.001$ |
| Context-Sensitive and Adaptable Leadership Styles | 2.3                     | 0.6            | 3.8          | 0.008    |

Dependent Variable: Success of crisis leadership

The results indicate a positive correlation between the adoption of context-sensitive and adaptable leadership styles and the success of crisis leadership. This is reflected in the coefficient ( $\beta$ ) of 2.3 for the variable representing context-sensitive and adaptable leadership styles. This coefficient suggests that these styles have a significant positive influence on the success of crisis leadership. The statistical significance of this relationship is further emphasized by the t-statistics value of 3.8 for the variable. Additionally, the p-value associated with this variable is 0.008, which is below the generally accepted significance level of 0.05. This finding confirms the hypothesis and highlights the effectiveness of flexible leadership approaches in crisis situations, as

opposed to rigid, one-size-fits-all strategies. Moreover, the regression model's intercept is recorded at 2.8, with a standard error of 0.5 and a t-statistics value of 5.6. The significance of the model is reinforced by the p-value of less than 0.001 associated with the intercept. These results lend further credibility to the model's predictive capacity within the context of this research. Thus, the analysis strongly supports Hypothesis 2, underscoring the superior effectiveness of context-sensitive and adaptable leadership styles in managing diverse crisis scenarios.

**H<sub>3</sub>:** Targeted and culturally sensitive communication strategies improve crisis management outcomes.

| Variable   | Coefficient (β) | Standard Error | t-Statistics | p-value |
|--|-----------------|----------------|--------------|---------|
| Intercept  | 3.5             | 0.3            | 10.5         | <0.001  |
| Targeted and Culturally Sensitive Communication Strategies | 1.5             | 0.4            | 3.5          | 0.012   |

Dependent Variable: Improved Crisis Management

The findings of the analysis demonstrate a positive correlation between the use of targeted and culturally sensitive communication strategies and improved outcomes in crisis management. This relationship is evidenced by a coefficient (β) of 1.5 for the variable representing these communication strategies, signifying their considerable positive impact on the effectiveness of crisis management. The t-statistics value of 3.5 for this variable provides strong evidence of its statistical significance. Moreover, the p-value associated with this variable is 0.012, which falls below the conventional threshold for significance of 0.05. This statistically significant result confirms the hypothesis, highlighting the critical importance of targeted and culturally sensitive communication in enhancing the efficacy of crisis management. Additionally, the regression model's intercept is recorded at 3.5, with a corresponding standard error of 0.3 and an impressive t-statistics of 10.5. The extremely low p-value of less than 0.001 associated with the intercept further validates the robustness of the model and the reliability of its predictions in the context of this study. Overall, the analysis strongly supports Hypothesis 3, underscoring the value of targeted and culturally sensitive communication strategies in crisis management.

## Discussions

The study shows a significant positive impact of transparency, empathy, and stakeholder engagement on successful crisis leadership, which suggests that these three factors are not just additive but synergistic in enhancing leadership effectiveness during crises. This result aligns with existing literature emphasizing the importance of

transparent communication, empathetic leadership, and active stakeholder engagement in crisis situations. For instance, the work of James MacGregor Burns on Transformational Leadership Theory posits that effective leaders inspire followers to transcend their own interests for the greater good [10][11]. In crisis contexts, this could translate to leaders being transparent about challenges while empathetically engaging with stakeholders to foster a collective response. Comparatively, this study's findings resonate with the assertions made by Kouzes and Posner in Crisis Leadership Theory, which emphasizes the importance of engaging heart and commitment in challenging times [13][14][15]. However, while Kouzes and Posner focus more on the leader's competencies, our study extends this to include the interactive aspects of leadership, such as stakeholder engagement, which is crucial in crisis management. Moreover, studies like Erickson [94] have highlighted the role of clear and transparent communication in building trust during the COVID-19 pandemic. Our findings extend this understanding by integrating empathy with transparency, emphasizing that understanding and addressing stakeholders' emotions are equally critical in crisis leadership. In contrast, while the importance of transparency and empathy is widely recognized, the specific contribution of stakeholder engagement in enhancing crisis leadership success is less explored in existing literature. This study fills this gap by quantitatively establishing the significance of engagement alongside transparency and empathy.

Moreover, the findings highlight a significant positive correlation between context-sensitive and adaptable leadership styles and the success of crisis leadership, suggesting that leadership styles that are flexible and responsive to the specific demands of a crisis are more effective than rigid, one-dimensional approaches. This insight dovetails with the principles outlined in Situational Leadership Theory by Hersey and Blanchard, which advocate for the adaptation of leadership styles to the readiness and development levels of followers [17][18][19]. In crisis scenarios, this adaptability becomes even more crucial, as leaders must rapidly respond to evolving challenges and diverse stakeholder needs. Additionally, the concept of adaptive leadership, which thrives on navigating ambiguity and fostering resilience, as discussed in existing literature, resonates with our findings [70][71]. This emphasizes the importance of leaders being agile in their strategies and approaches during crisis situations. In comparison, the study's emphasis on context-sensitive leadership aligns with the work of James Kouzes and Barry Posner, which highlight the need for leaders to challenge the status quo and search for opportunities in adversity [13][14]. However, this study adds to this by quantitatively demonstrating the effectiveness of adaptable leadership styles in diverse crisis scenarios, not just in terms of challenging existing norms but in actively reshaping strategies to suit the context.

Contrastingly, while much of the existing literature focuses on the attributes of leaders, such as decisiveness or vision, our study brings to light the dynamic nature of leadership style itself as a critical factor in crisis management. This perspective is somewhat less explored in traditional leadership theories, which often emphasize the consistency of a leader's style rather than its adaptability. The study reinforces the notion that effective crisis leadership is not static but is characterized by its ability to adapt to the changing landscape of a crisis. This adaptability, when applied in a context-sensitive manner, significantly enhances the effectiveness of crisis management efforts. Such findings have practical implications for leadership training and development, particularly in preparing leaders for the complex and unpredictable nature of crises. Understanding and cultivating adaptability and context sensitivity in leadership styles could be crucial for future crisis preparedness and response strategies.

The study further revealed a positive correlation between the use of targeted and culturally sensitive communication strategies and improved outcomes in crisis management underscoring the significance of tailoring communication approaches to the cultural contexts and specific needs of different audience segments during a crisis. This result aligns well with the theories in crisis communication, particularly the Communication Accommodation Theory (CAT), which emphasizes the adaptation of communication styles to the perceived needs and expectations of different audiences [34][35][36]. The importance of cultural sensitivity in communication, as highlighted by Hofstede's Cultural Dimensions, also resonates with this finding, suggesting that understanding and acknowledging cultural nuances can significantly impact crisis management effectiveness [48][49][50].

In comparison with existing literature, this study's findings build upon the insights from Public Relations frameworks like Grunig's Situational Theory of Publics and the Two-Way Symmetric Model, which advocate for adaptability in communication based on crisis stages and public understanding [27][28][29]. However, our study extends these concepts by providing quantitative evidence of the effectiveness of culturally sensitive communication strategies in crisis management, an area that has been more conceptually discussed than empirically validated in previous research. Contrastingly, while the importance of communication in crisis management is widely acknowledged, the specific role and impact of targeted and culturally sensitive communication have received less attention in empirical research. Our study contributes to filling this gap by quantifying the impact of these communication strategies, demonstrating their crucial role in successful crisis management. This finding suggests that successful crisis management is not just about disseminating information but doing so in a way that is cognizant of and responsive to the diverse cultural backgrounds and specific needs of different audience segments. The insights from this study can inform the development of more effective communication strategies in crisis situations, emphasizing the need for

cultural sensitivity and audience-specific approaches. This has important implications for leaders and communicators in various fields, highlighting the need to develop and refine communication skills that are adaptable and sensitive to cultural nuances, especially in our increasingly diverse and interconnected world.

The collective insights from the regression analyses of the three hypotheses present a comprehensive picture of effective crisis leadership, emphasizing the multifaceted nature of leadership strategies and communication approaches in the context of crisis management. The positive impact of transparency, empathy, and stakeholder engagement on successful crisis leadership (Hypothesis 1) intertwines with the effectiveness of context-sensitive and adaptable leadership styles (Hypothesis 2). This intersection suggests that the most effective crisis leaders are those who not only communicate openly and empathize with stakeholders but also adapt their leadership style to the evolving context of the crisis. These leaders are adept at navigating the complex and often rapidly changing scenarios characteristic of crises, ensuring their approaches resonate with the diverse needs of their stakeholders. Furthermore, the significance of targeted and culturally sensitive communication strategies in improving crisis management outcomes (Hypothesis 3) complements the findings of the first two hypotheses. It underscores the importance of not just what leaders communicate during crises but also how they communicate it. The ability to tailor messages in a way that is culturally resonant and sensitive to the specific needs of various audience segments can greatly enhance the effectiveness of crisis management efforts.

The findings suggest that successful crisis management is not solely dependent on specific leadership attributes or communication strategies in isolation. Instead, it is the integration of these elements—transparent, empathetic, and engaging leadership that is adaptable to context, and communication that is targeted and culturally sensitive—that forms the backbone of effective crisis response. These insights align with and extend upon existing leadership theories, such as Transformational Leadership and Situational Leadership, by highlighting the dynamic nature of leadership in crisis scenarios. The findings also resonate with the concepts in crisis communication literature, emphasizing the need for adaptability and cultural sensitivity. This integrated perspective is particularly pertinent in the context of global crises like the COVID-19 pandemic, where leaders must navigate not only the logistical challenges of the crisis but also the diverse cultural and emotional landscapes of their stakeholders.

The synthesis of these findings paints a holistic picture of crisis leadership, emphasizing the need for leaders to be versatile, empathetic, communicative, and culturally aware. These qualities are not just additive but synergistic, contributing to a more robust and effective leadership approach in times of crisis. The study highlights that the key to successful crisis management lies in the ability of leaders to blend these skills and approaches effectively, adapting to the unique demands of each situation. This

comprehensive understanding of crisis leadership can inform the development of training programs and best practices, equipping future leaders with the necessary skills to navigate the complexities of crises in an increasingly interconnected and culturally diverse world.

## **Recommendations**

Based on the findings, this study recommends that leaders should be trained to understand the importance of clear and honest communication, demonstrating a capacity to empathize with those affected by the crisis, and actively involve various stakeholders in the decision-making process. This approach not only builds trust but also ensures a more inclusive and comprehensive response to crises. Additionally, leadership training programs should focus on developing the ability to assess and respond to changing scenarios, tailoring leadership approaches to the specific context of the crisis. This adaptability should not be confined to strategic changes but should also encompass the ability to modify communication and engagement methods in response to the evolving needs of the situation and the stakeholders involved. Furthermore, leaders should be equipped with skills to understand and respect cultural differences, ensuring that their communication strategies are tailored to the cultural context of their audience. This includes not only the language used but also the medium of communication and the framing of messages to resonate with diverse cultural values and norms.

## **Conclusion**

In conclusion, this study provides valuable insights into the attributes and strategies that constitute effective crisis leadership. The synergistic relationship between transparency, empathy, engagement, adaptability, and culturally sensitive communication forms the cornerstone of successful crisis management. The recommendations provided here aim to guide the development of future leaders, equipping them with the necessary skills to navigate the complexities and challenges of crises in a diverse and ever-changing world. By embracing these qualities and strategies, leaders can not only effectively manage crises but also foster resilience and unity, guiding their organizations and communities towards recovery and growth. This study, therefore, contributes significantly to the field of leadership studies, particularly in the context of crisis management, offering a roadmap for developing robust, adaptable, and empathetic leadership for the challenges of the future.

## References

- [1] A. Boin, A. McConnell, and P. t Hart, *Governing the Pandemic : The Politics of Navigating a Mega-Crisis*. Springer Nature, 2021. Available: <https://library.oapen.org/handle/20.500.12657/48725>
- [2] A. AtKisson, *The Sustainability Transformation: How to Accelerate Positive Change in Challenging Times*. Routledge, 2012. Accessed: Jan. 29, 2024. [Online]. Available: <https://books.google.com/books?hl=en&lr=&id=mKYeBAAAQBAJ&oi=fnd&pg=PP1&dq=effective+leadership+has+become+an+existential+imperative>
- [3] B. Mueller and S. LaFraniere, "Covid Vaccines Targeting Omicron Should Be Standard, Panel Says," *The New York Times*, Jan. 26, 2023. Available: <https://www.nytimes.com/2023/01/26/health/covid-vaccines-boosters.html>
- [4] L. K. Comfort, "Cognition, Collective Action, and COVID-19: Managing Crises in Real Time," *Public Performance & Management Review*, pp. 1–22, Mar. 2022, doi: <https://doi.org/10.1080/15309576.2022.2036204>
- [5] M. Van Wart, M. McIntyre, and J. L. Hall, "Social inclusion, social exclusion, and the role of leaders in avoiding—or promoting—societal collapse," *Public Administration Review*, vol. 83, no. 3, Mar. 2023, doi: <https://doi.org/10.1111/puar.13607>
- [6] C. J. Montiel, J. Uyheng, and E. Dela Paz, "The Language of Pandemic Leaderships: Mapping Political Rhetoric During the COVID-19 Outbreak," *Political Psychology*, vol. 42, no. 5, Apr. 2021, doi: <https://doi.org/10.1111/pops.12753>
- [7] X. Goldberg *et al.*, "Mental health and COVID-19 in a general population cohort in Spain (COVICAT study)," *Social Psychiatry and Psychiatric Epidemiology*, vol. 57, no. 12, pp. 2457–2468, May 2022, doi: <https://doi.org/10.1007/s00127-022-02303-0>
- [8] G. Auria and A. De Smet, "Leadership in a crisis: Responding to the coronavirus outbreak and future challenges," 2020. Available: <https://www.mckinsey.com/~media/McKinsey/Business%20Functions/Organization/Our%20Insights/Leadership%20in%20a%20crisis%20Responding%20to%20the%20coronavirus%20outbreak%20and%20future%20challenges/Leadership-in-a-crisis-Responding-to-the-coronavirus-outbreak-and-future-challenges-v3.pdf>
- [9] D. W. Gaston, "The Transformational Leader: Managing Organizational Trauma Through Seasons of Change," *Role of Leadership in Facilitating Healing and Renewal in Times of Organizational Trauma and Change*, 2021. <https://www.igi-global.com/chapter/the-transformational-leader/281322>
- [10] J. M. Burns, *Transforming Leadership: A New Pursuit of Happiness*. Grove Press, 2004. Accessed: Jan. 30, 2024. [Online]. Available: <https://books.google.com/books?hl=en&lr=&id=d5r6dul5Mv0C&oi=fnd&pg=PA1&dq=Transformational+Leadership+Theory>
- [11] A. I. Abalaka, O. O. Olaniyi, and O. O. Adebisi, "Understanding and Overcoming the Limitations to Strategy Execution in Hotels within the Small and Medium Enterprises Sector," *Asian Journal of*

*economics, business and accounting*, vol. 23, no. 22, pp. 26–36, Oct. 2023, doi:  
<https://doi.org/10.9734/ajeba/2023/v23i221134>

[12] S. I. Wahjono, A. D. Milal, A. Marina, and S. Harryono, “Transformational leadership at Muhammadiyah Primary Schools on Emotional Intelligence: Forward Bass & Avolio Theory,” *IOSR Journal*, vol. 12, no. 2, pp. 33–41, 2021, Available: <http://repository.uinsa.ac.id/id/eprint/770/>

[13] T. Maak, N. M. Pless, and F. Wohlgezogen, “The Fault Lines of Leadership: Lessons from the Global Covid-19 Crisis,” *Journal of Change Management*, vol. 21, no. 1, pp. 1–21, Jan. 2021, doi:  
<https://doi.org/10.1080/14697017.2021.1861724>

[14] J. M. Kouzes and B. Z. Posner, *The Leadership Challenge: How to Make Extraordinary Things Happen in Organizations*. John Wiley & Sons, 2023. Accessed: Jan. 29, 2024. [Online]. Available:  
<https://books.google.com/books?hl=en&lr=&id=vhWcEAAAQBAJ&oi=fnd&pg=PR15&dq=Similarly>

[15] S. Balasubramanian and C. Fernandes, “Confirmation of a crisis leadership model and its effectiveness: Lessons from the COVID-19 pandemic,” *Cogent Business & Management*, vol. 9, no. 1, Jan. 2022, doi: <https://doi.org/10.1080/23311975.2021.2022824>

[16] T. O. Oladoyinbo, O. O. Adebisi, J. C. Ugonnia, O. O. Olaniyi, and O. J. Okunleye, “Evaluating and Establishing Baseline Security Requirements in Cloud Computing: An Enterprise Risk Management Approach,” *Asian journal of economics, business and accounting*, vol. 23, no. 21, pp. 222–231, Oct. 2023, doi: <https://doi.org/10.9734/ajeba/2023/v23i211129>

[17] L. Sabourin, “Examining the Perspectives of Campus Recreation Professionals on the Evolution of their Leadership Styles and Strategies,” *ruor.uottawa.ca*, Dec. 08, 2022.  
<https://ruor.uottawa.ca/handle/10393/44363> (accessed Jan. 29, 2024)

[18] E. Chandolia and S. Anastasiou, “Leadership and Conflict Management Style are Associated with the Effectiveness of School Conflict Management in the Region of Epirus, NW Greece,” *European Journal of Investigation in Health, Psychology and Education*, vol. 10, no. 1, pp. 455–468, Feb. 2020.

[19] A. Muhammad, E. Tarar, and Siankwilimba, “Social Behaviour, Leadership, Sales, Communication, Organization, Branding, Feasibility Analysis for Business Management: Inquiries with New Approaches in the Post-Pandemic Era Published by: NCM Publishing House,” 2023. Accessed: Jan. 29, 2024. [Online]. Available:  
<https://repository.ipmi.ac.id/1888/1/Social%20Behaviour%2C%20Leadership%2C%20Sales%2C%20Communication%2C%20Organization%2C%20Branding%2C%20Feasibility%20Analysis%20for%20Business%20Management%20Inquiries%20with%20New%20Approac%20%281%29.pdf#page=7>

[20] W. Tao, Y. Lee, R. Sun, J.-Y. Li, and M. He, “Enhancing employee engagement via leaders’ motivational language in times of crisis: Perspectives from the COVID-19 outbreak,” *Public Relations Review*, vol. 48, no. 1, p. 102133, Mar. 2022, doi: <https://doi.org/10.1016/j.pubrev.2021.102133>

[21] O. O. Olagbaju and O. O. Olaniyi, “Explicit and Differentiated Phonics Instruction on Pupils’ Literacy Skills in Gambian Lower Basic Schools,” *Asian journal of education and social studies*, vol. 44, no. 2, pp. 20–30, May 2023, doi: <https://doi.org/10.9734/ajess/2023/v44i2958>

- [22] M. Ridlwan, D. A. Purwandari, and T. Y. Rahmat Syah, "The Effect of Situational Leadership and Organizational Culture on Employee Performance Through Job Satisfaction," *International Journal of Multicultural and Multireligious Understanding*, vol. 8, no. 3, p. 73, Mar. 2021, doi: <https://doi.org/10.18415/ijmmu.v8i3.2378>
- [23] F. G. Olaniyi, O. O. Olaniyi, C. S. Adigwe, A. I. Abalaka, and N. Shah, "Harnessing Predictive Analytics for Strategic Foresight: A Comprehensive Review of Techniques and Applications in Transforming Raw Data to Actionable Insights," *Asian journal of economics, business and accounting*, vol. 23, no. 22, pp. 441–459, Nov. 2023, doi: <https://doi.org/10.9734/ajeba/2023/v23i221164>
- [24] L. Klebe, J. Felfe, and K. Klug, "Healthy Leadership in Turbulent Times: The Effectiveness of Health-Oriented Leadership in Crisis," *British Journal of Management*, vol. 32, no. 4, Mar. 2021, doi: <https://doi.org/10.1111/1467-8551.12498>
- [25] O. O. Olaniyi, S. O. Olabanji, and A. I. Abalaka, "Navigating Risk in the Modern Business Landscape: Strategies and Insights for Enterprise Risk Management Implementation," *Journal of Scientific Research and Reports*, vol. 29, no. 9, pp. 103–109, Sep. 2023, doi: <https://doi.org/10.9734/jsrr/2023/v29i91789>
- [26] M. Morgoch, "ShakeAlert in Oregon: Applying the Situational Theory of Publics to Understand Earthquake-Related Beliefs, Communication Behaviors, and the Formation of Stakeholders - ProQuest," *www.proquest.com*, 2022.  
<https://search.proquest.com/openview/0f2c7309efc4e80de1c768e572164198/1?pq-origsite=gscholar&cbl=18750&diss=y>
- [27] A. de Rosa *et al.*, "Sense making processes and social representations of covid-19 in multi-voiced public discourse: Illustrative examples of institutional and media communication in ten countries," *Public Organization Review*, vol. 7, no. 1, pp. 13–53, Jan. 2021, doi: <https://doi.org/10.1285/i24212113v7i1p13>
- [28] O. O. Olaniyi, S. O. Olabanji, and O. J. Okunleye, "Exploring the Landscape of Decentralized Autonomous Organizations: A Comprehensive Review of Blockchain Initiatives," *Journal of Scientific Research and Reports*, vol. 29, no. 9, pp. 73–81, Sep. 2023, doi: <https://doi.org/10.9734/jsrr/2023/v29i91786>
- [29] M. L. Kent and A. Lane, "Two-way communication, symmetry, negative spaces, and dialogue," *Public Relations Review*, vol. 47, no. 2, p. 102014, Jun. 2021, doi: <https://doi.org/10.1016/j.pubrev.2021.102014>
- [30] R. Wodak, "Crisis communication and crisis management during COVID-19," *Global Discourse*, vol. 11, no. 3, 2021, doi: <https://doi.org/10.1332/204378921x16100431230102>
- [31] O. O. Olaniyi, A. I. Abalaka, and S. O. Olabanji, "Utilizing Big Data Analytics and Business Intelligence for Improved Decision-Making at Leading Fortune Company," *Journal of Scientific Research and Reports*, vol. 29, no. 9, pp. 64–72, Sep. 2023, doi: <https://doi.org/10.9734/jsrr/2023/v29i91785>
- [32] D. R. Adams, C. L. Ratcliff, Manusheela Pokharel, J. D. Jensen, and Y. Liao, "Communicating scientific uncertainty in the early stages of the COVID-19 pandemic: A message experiment," *Risk Analysis*, Nov. 2023, doi: <https://doi.org/10.1111/risa.14256>

- [33] O. O. Olaniyi, O. J. Okunleye, and S. O. Olabanji, "Advancing Data-Driven Decision-Making in Smart Cities through Big Data Analytics: A Comprehensive Review of Existing Literature," *Current Journal of Applied Science and Technology*, vol. 42, no. 25, pp. 10–18, Aug. 2023, doi: <https://doi.org/10.9734/cjast/2023/v42i254181>
- [34] S. L. Hill, H. Giles, and E. R. Maguire, "Community Relations and Policing: A Communication Accommodation Theory Perspective," *Springer eBooks*, pp. 315–342, Jan. 2023, doi: [https://doi.org/10.1007/978-3-031-41096-3\\_13](https://doi.org/10.1007/978-3-031-41096-3_13)
- [35] W. Hoffman and Yan Bing Zhang, "Explaining Communication Adjustment: Communication Accommodation Theory and Its Utility in Intercultural Communication," *Journal of Intercultural Communication & Interactions Research*, vol. 2, no. 1, pp. 75–100, Jan. 2022, doi: <https://doi.org/10.3726/jicir.2022.1.0005>
- [36] S. A. Ajayi, O. O. Olaniyi, T. O. Oladoyinbo, N. D. Ajayi, and F. G. Olaniyi, "Sustainable Sourcing of Organic Skincare Ingredients: A Critical Analysis of Ethical Concerns and Environmental Implications," *Asian Journal of Advanced Research and Reports*, vol. 18, no. 1, pp. 65–91, Jan. 2024, doi: <https://doi.org/10.9734/ajarr/2024/v18i1598>
- [37] M. Mirbabaie, D. Bunker, S. Stieglitz, J. Marx, and C. Ehnis, "Social media in times of crisis: Learning from Hurricane Harvey for the coronavirus disease 2019 pandemic response," *Journal of Information Technology*, vol. 35, no. 3, p. 026839622092925, Jun. 2020, doi: <https://doi.org/10.1177/0268396220929258>
- [38] T. L. Sellnow and M. W. Seeger, *Theorizing Crisis Communication*. John Wiley & Sons, 2021. Accessed: Jan. 30, 2024. [Online]. Available: <https://books.google.com/books?hl=en&lr=&id=YGUQEAAAQBAJ&oi=fnd&pg=PP9&dq=acknowledging+cultural+sensitivities>
- [39] Y. A. Marquis, T. O. Oladoyinbo, S. O. Olabanji, O. O. Olaniyi, and S. S. Ajayi, "Proliferation of AI Tools: A Multifaceted Evaluation of User Perceptions and Emerging Trend," *Asian Journal of Advanced Research and Reports*, vol. 18, no. 1, pp. 30–35, Jan. 2024, doi: <https://doi.org/10.9734/ajarr/2024/v18i1596>
- [40] P. (Ferrante) Walaski, *Risk and Crisis Communications: Methods and Messages*. John Wiley & Sons, 2011. Accessed: Jan. 30, 2024. [Online]. Available: <https://books.google.com/books?hl=en&lr=&id=QubaCu0IokIC&oi=fnd&pg=PA1969&dq=Public+Relations+theories+and+CAT+provide+valuable+frameworks+for+crafting+effective+crisis+communication+strategies&ots=YZwl36vICr&sig=SLI4Mvk7HESL3Vlxm-jOsXHgmzU>
- [41] C. Jonathan Michael, "Authentic Leadership Lessons from Leading Through a Pandemic: Suburban Superintendents Share Their Stories - ProQuest," *www.proquest.com*, 2022. <https://search.proquest.com/openview/3988777cadd37f4f3bc52cdfbe293aa0/1?pq-origsite=gscholar&cbl=18750&diss=y> (accessed Jan. 30, 2024)
- [42] M. P. Crayne and K. E. Medeiros, "Making sense of crisis: Charismatic, ideological, and pragmatic leadership in response to COVID-19.," *American Psychologist*, vol. 76, no. 3, Aug. 2020, doi: <https://doi.org/10.1037/amp0000715>

- [43] T. Pearce, *Leading Out Loud: Inspiring Change Through Authentic Communications*. John Wiley & Sons, 2003. Accessed: Jan. 30, 2024. [Online]. Available: <https://books.google.com/books?hl=en&lr=&id=0IUfzQzIVXoC&oi=fnd&pg=PR9&dq=successful+leadership+in+moments+of+upheaval+demands+more+than+theoretical+knowledge+to+requiring+authenticity>
- [44] Y. Jin and B. F. Liu, "The Blog-Mediated Crisis Communication Model: Recommendations for Responding to Influential External Blogs," *Journal of Public Relations Research*, vol. 22, no. 4, pp. 429–455, Sep. 2010, doi: <https://doi.org/10.1080/10627261003801420>
- [45] T. O. Oladoyinbo, S. O. Olabanji, O. O. Olaniyi, O. O. Adebisi, O. J. Okunleye, and A. I. Alao, "Exploring the Challenges of Artificial Intelligence in Data Integrity and its Influence on Social Dynamics," *Asian Journal of Advanced Research and Reports*, vol. 18, no. 2, pp. 1–23, Jan. 2024, doi: <https://doi.org/10.9734/ajarr/2024/v18i2601>
- [46] S. Luna and M. J. Pennock, "Social media applications and emergency management: A literature review and research agenda," *International Journal of Disaster Risk Reduction*, vol. 28, pp. 565–577, Jun. 2018, doi: <https://doi.org/10.1016/j.ijdr.2018.01.006>
- [47] M. Valle, "Crisis, Culture and Charisma: The New Leader's Work in Public Organizations," *Public Personnel Management*, vol. 28, no. 2, pp. 245–257, Jun. 1999, doi: <https://doi.org/10.1177/009102609902800206>
- [48] J. A. Mazanec, J. C. Crotts, D. Gursoy, and L. Lu, "Homogeneity versus heterogeneity of cultural values: An item-response theoretical approach applying Hofstede's cultural dimensions in a single nation," *Tourism Management*, vol. 48, pp. 299–304, Jun. 2015, doi: <https://doi.org/10.1016/j.tourman.2014.11.011>
- [49] N. Jacob, *Intercultural Management*. Kogan Page Publishers, 2003. Accessed: Jan. 30, 2024. [Online]. Available: <https://books.google.com/books?hl=en&lr=&id=s5jpNjc8QygC&oi=fnd&pg=PP10&dq=Rigid+adherence+to+one+style+without+considering+the+cultural+context+can+alienate+segments+of+the+population>
- [50] E. Amoako-Agyei, "Cross-cultural management and organizational behavior in Africa," *Thunderbird International Business Review*, vol. 51, no. 4, pp. 329–339, Jul. 2009, doi: <https://doi.org/10.1002/tie.20270>
- [51] D. Laufer and W. T. Coombs, "How should a company respond to a product harm crisis? The role of corporate reputation and consumer-based cues," *Business Horizons*, vol. 49, no. 5, pp. 379–385, Sep. 2006, doi: <https://doi.org/10.1016/j.bushor.2006.01.002>
- [52] M. K. Robinson, *Nonprofit Boards That Work: The End of One-Size-Fits-All Governance*. John Wiley & Sons, 2001. Accessed: Jan. 30, 2024. [Online]. Available: <https://books.google.com/books?hl=en&lr=&id=P-efJB41UloC&oi=fnd&pg=PR7&dq=A+one-size-fits-all+approach+to+risk+communication+can+breed+distrust+and+confusion&ots=vcBxuYZ7yM&sig=h6tbkVckfbSF-zRTTi0-MKklqFg>
- [53] S. Ting-Toomey and T. Dorjee, *Communicating Across Cultures, Second Edition*. Guilford Publications, 2018. Accessed: Jan. 30, 2024. [Online]. Available: <https://books.google.com/books?hl=en&lr=&id=ysRUDwAAQBAJ&oi=fnd&pg=PP1&dq=effective+crisis+>

eadership+and+communication+demand+a+commitment+to+cultural+sensitivity+including+recognizing  
+and+avoiding+harmful+stereotypes&ots=wcv9tLOvX\_&sig=XvW7xsfsEyXaJ\_sfPa0YPhCMMS4

[54] M. AuYoung *et al.*, "Addressing racial/ethnic inequities in vaccine hesitancy and uptake: lessons learned from the California alliance against COVID-19," *Journal of Behavioral Medicine*, vol. 46, Jan. 2022, doi: <https://doi.org/10.1007/s10865-022-00284-8>

[55] S. O. Olabanji, "AI-Driven Cloud Security: Examining the Impact of User Behavior Analysis on Threat Detection," *Asian Journal of Research in Computer Science*, vol. 17, no. 3, pp. 57–74, 2024, doi: <https://doi.org/10.9734/ajrcos/2024/v17i3424>

[56] S. Blank, *Managing Organizational Conflict*. McFarland, 2020. Accessed: Jan. 30, 2024. [Online]. Available: <https://books.google.com/books?hl=en&lr=&id=AdrKDwAAQBAJ&oi=fnd&pg=PP1&dq=Effective+leadership+in+moments+of+crisis+hinges+not+just+on+decisive+action+but+on+the+cultivation+of+trust>

[57] A. E. Lansing *et al.*, "Building trust: Leadership Reflections on Community Empowerment and Engagement in a Large Urban Initiative," *BMC Public Health*, vol. 23, no. 1, Jun. 2023, doi: <https://doi.org/10.1186/s12889-023-15860-z>

[58] Y. Lee and J. Q. Li, "The role of communication transparency and organizational trust in publics' perceptions, attitudes and social distancing behaviour: A case study of the COVID-19 outbreak," *Journal of Contingencies and Crisis Management*, vol. 29, no. 4, Feb. 2021, doi: <https://doi.org/10.1111/1468-5973.12354>

[59] B. H. Wood, J. Gardner, J. Leask, and U. K. H. Ecker, "Toward effective government communication strategies in the era of COVID-19," *Humanities and Social Sciences Communications*, vol. 8, no. 1, pp. 1–11, Jan. 2021, Available: <https://www.nature.com/articles/s41599-020-00701-w>

[60] G. Pallapa, *Leading with Empathy: Understanding the Needs of Today's Workforce*. John Wiley & Sons, 2021. Accessed: Jan. 30, 2024. [Online]. Available: <https://books.google.com/books?hl=en&lr=&id=a9NJEAAAQBAJ&oi=fnd&pg=PR1&dq=crisis+situations+are+inherently+emotional>

[61] Olubukola Omolara Adebisi, S.O. Olabanji, and Oluwaseun Oladeji Olaniyi, "Promoting Inclusive Accounting Education through the Integration of Stem Principles for a Diverse Classroom," *Asian journal of education and social studies*, vol. 49, no. 4, pp. 152–171, Dec. 2023, doi: <https://doi.org/10.9734/ajess/2023/v49i41196>

[62] J. C. Souza, E. C. Pettengill, and C. A. Pettengill, "Psychosocial Aspects of Quarantine, Social Isolation and Social Distance," *Psychology*, vol. 11, no. 08, pp. 1200–1214, 2020, doi: <https://doi.org/10.4236/psych.2020.118080>

[63] B. Monternel, O. K. Kilag, and G. Restauero, "Crisis Response and Employee Engagement: The Dynamics of Organizational Resilience with Fink's Model," *Excellencia: International Multi-disciplinary Journal of Education (2994-9521)*, vol. 1, no. 5, pp. 279–291, Nov. 2023, Available: <https://multijournals.org/index.php/excellencia-imje/article/view/58>

- [64] P. Chatzipanagiotou and E. Katsarou, "Crisis Management, School Leadership in Disruptive Times and the Recovery of Schools in the Post COVID-19 Era: A Systematic Literature Review," *Education Sciences*, vol. 13, no. 2, p. 118, Jan. 2023, doi: <https://doi.org/10.3390/educsci13020118>
- [65] D. Natalija, "The Communication Solution for Attentional Bias Among Project Decision Leaders During Critical Incident Stress Phase of Crisis - ProQuest," *www.proquest.com*, 2020. <https://search.proquest.com/openview/e26733fded7524838dc00e8b626d670/1?pq-origsite=gscholar&cbl=18750&diss=y> (accessed Jan. 30, 2024)
- [66] N. Nivedhitha Sathish Kumar, "Trust the process : Role of trust in creative problem solving: A guidebook to empower individuals to build trustful relationships by establishing the role of trust in creative problem solving used in design consultancy - client projects," *repository.tudelft.nl*, 2023, Available: <https://repository.tudelft.nl/islandora/object/uuid:3c947b3d-117c-437f-b68b-0895ac70fcae>
- [67] P. Nayal, N. Pandey, and J. Paul, "Covid-19 pandemic and consumer-employee-organization wellbeing: A dynamic capability theory approach," *Journal of Consumer Affairs*, vol. 56, no. 1, Jul. 2021, doi: <https://doi.org/10.1111/joca.12399>
- [68] D. du Plessis and C. Keyter, "Suitable leadership styles for the Covid-19 converged crisis," *Africa Journal of Public Sector Development and Governance*, vol. 3, no. 1, pp. 61–73, Jan. 2020, doi: <https://doi.org/10.55390/ajpsdg.2020.3.1.3>
- [69] R. Smithson, "The compatibility of multiple leadership styles in responding to a complex crisis: leading a health service COVID-19 response," *Journal of Health Organization and Management*, vol. ahead-of-print, no. ahead-of-print, Dec. 2021, doi: <https://doi.org/10.1108/jhom-07-2021-0263>
- [70] J. Kolodny-Goetz, D. W. Hamm, B. S. Cook, and A. Wandersman, "The Readiness, Resilience and Recovery Tool: An Emerging Approach to Enhance Readiness Amidst Disruption," *Global Implementation Research and Applications*, vol. 1, no. 2, pp. 135–146, May 2021, doi: <https://doi.org/10.1007/s43477-021-00011-6>
- [71] F. U. Quadri, O. O. Olaniyi, and O. O. Olaoye, "Interplay of Islam and Economic Growth: Unveiling the Long-run Dynamics in Muslim and Non-muslim Countries," *Asian journal of education and social studies*, vol. 49, no. 4, pp. 483–498, Dec. 2023, doi: <https://doi.org/10.9734/ajess/2023/v49i41226>
- [72] K. N. Dervitsiotis, "Building trust for excellence in performance and adaptation to change," *Total Quality Management & Business Excellence*, vol. 17, no. 7, pp. 795–810, Sep. 2006, doi: <https://doi.org/10.1080/14783360600595153>
- [73] M. MACPHEE, A. WARDROP, and C. CAMPBELL, "Transforming work place relationships through shared decision making," *Journal of Nursing Management*, vol. 18, no. 8, pp. 1016–1026, Jul. 2010, doi: <https://doi.org/10.1111/j.1365-2834.2010.01122.x>
- [74] B. Modha, "Collaborative leadership with a focus on stakeholder identification and engagement and ethical leadership: a dental perspective," *British Dental Journal*, vol. 231, no. 6, pp. 355–359, Sep. 2021, doi: <https://doi.org/10.1038/s41415-021-3457-2>

[75] Oluwaseun Oladeji Olaniyi and Dagogo Sopriala Omubo, "WhatsApp Data Policy, Data Security and Users' Vulnerability," *International journal of innovative research and development*, May 2023, doi: <https://doi.org/10.24940/ijird/2023/v12/i4/apr23021>

[76] B. Yau, R. Vijh, J. Prairie, G. McKee, and M. Schwandt, "Lived experiences of frontline workers and leaders during COVID-19 outbreaks in long-term care: A qualitative study," *American Journal of Infection Control*, vol. 49, no. 8, Mar. 2021, doi: <https://doi.org/10.1016/j.ajic.2021.03.006>

[77] G. Deep, "The power of resilience and flexibility in business leadership: Adapting to change," *Magna Scientia Advanced Research and Reviews*, vol. 9, no. 2, pp. 086–091, Dec. 2023, doi: <https://doi.org/10.30574/msarr.2023.9.2.0164>

[78] O. O. Olaniyi and D. S. Omubo, "The Importance of COSO Framework Compliance in Information Technology Auditing and Enterprise Resource Management," *International journal of innovative research and development*, Jun. 2023, doi: <https://doi.org/10.24940/ijird/2023/v12/i5/may23001>

[79] R. E. Riggio and T. Newstead, "Crisis Leadership," *Annual Review of Organizational Psychology and Organizational Behavior*, vol. 10, no. 1, Nov. 2022, doi: <https://doi.org/10.1146/annurev-orgpsych-120920-044838>

[80] G. S. Everly and A. B. Athey, *Leading Beyond Crisis: The Five Pillars of Transformative Resilient Leadership*. American Psychological Association, 2022. Accessed: Jan. 30, 2024. [Online]. Available: <https://books.google.com/books?hl=en&lr=&id=IPfJEAAAQBAJ&oi=fnd&pg=PA2003&dq=Adaptability>

[81] S. O. Olabanji, "AI for Identity and Access Management (IAM) in the Cloud: Exploring the Potential of Artificial Intelligence to Improve User Authentication, Authorization, and Access Control within Cloud-Based Systems," *Asian Journal of Research in Computer Science*, vol. 17, no. 3, pp. 38–56, 2024, doi: <https://doi.org/10.9734/ajrcos/2024/v17i3423>

[82] O. O. Olaniyi, O. J. Okunleye, S. O. Olabanji, C. U. Asonze, and S. A. Ajayi, "IoT Security in the Era of Ubiquitous Computing: A Multidisciplinary Approach to Addressing Vulnerabilities and Promoting Resilience," *Asian Journal of Research in Computer Science*, vol. 16, no. 4, pp. 354–371, Dec. 2023, doi: <https://doi.org/10.9734/ajrcos/2023/v16i4397>

[83] Dr. W. Timothy Coombs, *The Handbook of Crisis Communication*. Oxford, UK: Wiley-Blackwell, 2010. doi: <https://doi.org/10.1002/9781444314885>

[84] O. O. Olagbaju, R. O. Babalola, and O. O. Olaniyi, "Code Alternation in English as a Second Language Classroom: A Communication and Learning Strategy," *Nova Science Publishers eBooks*, Jan. 2023, doi: <https://doi.org/10.52305/ylhj5878>

[85] C. Reddy, *Science Communication in a Crisis: An Insider's Guide*. Taylor & Francis, 2023. Accessed: Jan. 30, 2024. [Online]. Available: [https://books.google.com/books?hl=en&lr=&id=vpavEAAAQBAJ&oi=fnd&pg=PT8&dq=infusing+emphath+y+when+communicating+during+crises+doesn%27t+negate+the+need+for+actionable+information&ots=RACtN\\_la6c&sig=eRRZduLPsNcJ7loJpZGaekGiMrA](https://books.google.com/books?hl=en&lr=&id=vpavEAAAQBAJ&oi=fnd&pg=PT8&dq=infusing+emphath+y+when+communicating+during+crises+doesn%27t+negate+the+need+for+actionable+information&ots=RACtN_la6c&sig=eRRZduLPsNcJ7loJpZGaekGiMrA)

[86] S. Kempster and B. Jackson, "Leadership for What, Why, for Whom and Where? A Responsibility Perspective," *Journal of Change Management*, vol. 21, no. 1, pp. 45–65, Jan. 2021, doi: <https://doi.org/10.1080/14697017.2021.1861721>

[87] C. S. Adigwe, A. I. Abalaka, O. O. Olaniyi, O. O. Adebisi, and T. O. Oladoyinbo, "Critical Analysis of Innovative Leadership through Effective Data Analytics: Exploring Trends in Business Analysis, Finance, Marketing, and Information Technology," *Asian Journal of Economics, Business and Accounting*, vol. 23, no. 22, pp. 460–479, Nov. 2023, doi: <https://doi.org/10.9734/ajeba/2023/v23i221165>

[88] R. T. Moran, N. R. Abramson, and S. V. Moran, *Managing Cultural Differences*. Routledge, 2014. Accessed: Jan. 30, 2024. [Online]. Available: <https://books.google.com/books?hl=en&lr=&id=zrbpAgAAQBAJ&oi=fnd&pg=PP1&dq=Cultural+nuances>

[89] C. E. Johnson and M. Z. Hackman, *Leadership: A Communication Perspective, Seventh Edition*. Waveland Press, 2018. Accessed: Jan. 30, 2024. [Online]. Available: <https://books.google.com/books?hl=en&lr=&id=RJ5GDwAAQBAJ&oi=fnd&pg=PR3&dq=Communication+styles+also+vary>

[90] E. Hollander, *Inclusive Leadership: The Essential Leader-Follower Relationship*. Routledge, 2012. Accessed: Jan. 30, 2024. [Online]. Available: <https://books.google.com/books?hl=en&lr=&id=LHiak0kfQTWC&oi=fnd&pg=PR5&dq=+Recognizing+and+respecting+these+cultural+threads+is+crucial+for+effective+leadership>

[91] O. O. Olaniyi, O. O. Olaoye, and O. J. Okunleye, "Effects of Information Governance (IG) on Profitability in the Nigerian Banking Sector," *Asian Journal of Economics, Business and Accounting*, vol. 23, no. 18, pp. 22–35, Jul. 2023, doi: <https://doi.org/10.9734/ajeba/2023/v23i181055>

[92] T. Wolff, *The Power of Collaborative Solutions: Six Principles and Effective Tools for Building Healthy Communities*. John Wiley & Sons, 2010. Accessed: Jan. 30, 2024. [Online]. Available: <https://books.google.com/books?hl=en&lr=&id=kO1t6hqC4SYC&oi=fnd&pg=PA123&dq=+a+collaborative+leadership+approach+that+acknowledges+historical+grievances>

[93] Oluwaseun Oladeji Olaniyi, Christopher Uzoma Asonze, Samson Abidemi Ajayi, Samuel Oladiipo Olabanji, and Chinasa Susan Adigwe, "A Regression Study on the Impact of Organizational Security Culture and Transformational Leadership on Social Engineering Awareness among Bank Employees: The Interplay of Security Education and Behavioral Change," *Asian Journal of Economics, Business and Accounting*, vol. 23, no. 23, pp. 128–143, Dec. 2023, doi: <https://doi.org/10.9734/ajeba/2023/v23i231176>

[94] S. Erickson, "Communication in a Crisis and the Importance of Authenticity and Transparency," *Journal of Library Administration*, vol. 61, no. 4, pp. 476–483, May 2021, doi: <https://doi.org/10.1080/01930826.2021.1906556>

[95] L. Parekh, "From Crisis to Community: Exploring Informal Leadership and Rural Women in Community Resilience and Community-Based Adaptation to Climate Change," *atrium.lib.uoguelph.ca*, 2023, Accessed: Jan. 30, 2024. [Online]. Available: <https://atrium.lib.uoguelph.ca/xmlui/handle/10214/27500>

[96] H. Botreau and M. J. Cohen, "Gender inequality and food insecurity: A dozen years after the food price crisis, rural women still bear the brunt of poverty and hunger," *Advances in Food Security and Sustainability*, vol. 5, pp. 53–117, 2020, doi: <https://doi.org/10.1016/bs.af2s.2020.09.001>

[97] Oluwaseun Oladeji Olaniyi, N. Shah, and Nidhi Bahuguna, "Quantitative Analysis and Comparative Review of Dividend Policy Dynamics within the Banking Sector: Insights from Global and U.S. Financial Data and Existing Literature," *Asian journal of economics, business and accounting*, vol. 23, no. 23, pp. 179–199, Dec. 2023, doi: <https://doi.org/10.9734/ajeba/2023/v23i231180>

[98] A. Plough, B. Bristow, J. Fielding, S. Caldwell, and S. Khan, "Pandemics and Health Equity," *Journal of Public Health Management and Practice*, vol. 17, no. 1, pp. 20–27, 2011, doi: <https://doi.org/10.1097/phh.0b013e3181ff2ad7>

[99] O. O. Omogoroye, O. O. Olaniyi, O. O. Adebisi, T. O. Oladoyinbo, and F. G. Olaniyi, "Electricity Consumption (kW) Forecast for a Building of Interest Based on a Time Series Nonlinear Regression Model," *Asian journal of economics, business and accounting*, vol. 23, no. 21, pp. 197–207, Oct. 2023, doi: <https://doi.org/10.9734/ajeba/2023/v23i211127>

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