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# Getting 'Entangled': A Chaos Theory Perspective on Crisis Management Practices in the Hotel Industry in Kenya

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## Abstract

Effective crisis management is paramount in the rapidly evolving global hotel industry. This study delves into a novel approach, applying chaos theory principles—the interconnectedness of factors, sensitivity to initial conditions, and the emergence of self-organising behaviours to unravel crisis management practices that can disentangle Kenyan hotels from chaotic situations that arise from crises. The research addresses a critical gap in existing literature, as prior studies have often overlooked the specific application of chaos theory principles within Kenya's unique socioeconomic and cultural context. By adopting a chaos theory perspective, this research dissects the intricate and often unpredictable dynamics of getting entangled in crises in Kenyan hotels. The study's methodology involves a comprehensive analysis of 510 management personnel from diverse star-rated hotels in Mombasa County, employing Partial Least Squares Structural Equation Modelling (PLS-SEM) to validate the proposed theoretical framework. The findings confirm the significance of sensitivity to initial conditions and the emergence of self-organising behaviours in enhancing crisis management practices. The interconnectedness of factors did not significantly impact crisis management in this context. The results provide actionable insights for hotel industry professionals, policymakers, and scholars, offering a fresh lens to view and enhance crisis management practices tailored to the specific needs of Kenyan hotels. Specifically, hotels that are more sensitive to initial conditions and foster self-organising behaviours among their staff demonstrate more effective crisis responses and resilience. These results highlight the importance of proactive strategies

that enhance sensitivity to initial conditions and promote self-organising behaviours, enabling hotels to navigate chaotic situations and disentangle from crises effectively. By embracing chaos theory principles, hotels can cultivate a culture encouraging autonomy, collaboration, and adaptability, strengthening their crisis management practices and ensuring resilience in the face of unpredictable challenges. Moreover, bridging this research gap contributes valuable knowledge that enriches the academic discourse and empowers the hotel industry stakeholders with practical strategies to handle crises.

**Keywords:** Crisis Management Practices, Chaos Theory Perspective, Sensitivity to Initial Conditions, Interconnectedness, Self-organising Behaviours

## INTRODUCTION

In today's fast-paced and interconnected world, the hotel industry faces many challenges that can disrupt its operations and reputation at any given moment. From natural disasters and pandemics to economic downturns and social crises, hotels must navigate complex uncertainties (Zhong et al., 2021). To effectively respond to these challenges, a fresh perspective on crisis management is required—one that goes beyond conventional linear thinking.

This paper delves into a novel approach to understanding and improving crisis management within the hospitality sector by exploring the chaos theory perspective on crisis management practices in the Hotel Industry. In adopting principles from chaos theory, the study seeks to unravel the intricate and often unpredictable dynamics that emerge during crises. Chaos theory, rooted in mathematics and physics, has increasing applications in various fields, including economics, ecology, and organisational management (Biswas et al., 2015). It emphasises systems' inherent complexity and non-linearity, suggesting that small initial changes can lead to large and unpredictable outcomes (Lartey, 2020). This perspective challenges traditional crisis management models that rely on rigid plans and predefined procedures (Boukas and Ziakas, 2014).

The Theory has significantly expanded the scope of systems thinking in crisis management. In contrast to conventional crisis management models, chaos theory offers a perspective that regards systems, including the intricate tourism and hospitality system, as inherently unstable, nonlinear, and entirely unpredictable (Speakman and Díaz Garay, 2016). This viewpoint particularly applies to the hotel industry, where crises can manifest highly unpredictably. Chaos theory introduces several crucial components that, if recognised by entrepreneurs during a crisis, can present opportune moments for managerial intervention.

The global tourism industry has recently confronted a series of crises, encompassing acts of terrorism, disease epidemics, political unrest, and natural disasters (Cro and Martins, 2017). These incidents have notably heightened the vulnerability of the tourism sector, particularly concerning the threats posed by calamities and terrorist activities (Koshteh, 2018). The hotel industry's performance in regions affected by such crises has been severely compromised by a range of significant events, including terrorist attacks in both European and Asian locales, the

Ebola virus outbreak in West Africa, maritime disasters involving cruise ships in Thailand and China, and most notably, the COVID-19 pandemic (Mizrachi and Fuchs, 2016; Fong et al., 2020).

This is not to forget the far-reaching impact of the COVID-19 pandemic, which spread to more than 200 nations and regions, resulting in over 235 million confirmed cases. This unprecedented crisis unleashed profound shocks and profoundly affected the global hotel industry during its acute phases (Xie et al., 2022). Such crisis events significantly threaten the survival and advancement of hotels and their workforce. Consequently, evaluating the chaos theory perspective on crisis management practices in the hotel industry becomes imperative as it aids in formulating effective response and recovery strategies to safeguard their interests.

Despite the growing body of research in chaos theory, a notable concern within the field pertains to the readiness of many managers to effectively handle chaotic situations caused by crises, thereby impacting the overall performance of hotels. This study draws from the principles of chaos theory to interrogate the selection of crisis management practices in the hotel industry. Specifically, we investigate how the interconnectedness of factors, the sensitivity to initial conditions, and the emergence of self-organising behaviours affect crisis management practices in the hotel industry. By embracing the inherent chaos of crises, hotels may discover innovative strategies for resilience, adaptability, and recovery. This paper aims to provide hotel industry professionals, scholars, and stakeholders with a fresh lens to view and enhance their crisis management practices. Hotels can better prepare for, respond to, and recover from the unexpected challenges that define our ever-changing world by understanding crises as entangled, dynamic systems rather than linear events.

## Literature Review and Hypothesis Development

Chaos theory offers a distinctive perspective on crisis management within the hotel industry, characterising systems like hospitality as volatile, nonlinear, and unpredictable. Particularly in crises related to terrorism and pandemics, chaos theory provides a more suitable theoretical framework, emphasising three key components: interconnectedness of factors, sensitivity to initial conditions, and the emergence of self-organising behaviours (Mbengue et al., 2018). Interconnectedness underscores the complex web of relationships within hotels, including guest preferences, supply chain dependencies, and global events, allowing anticipation of potential ripple effects during crises (Buhalis and Leung, 2018). The sensitivity to initial conditions, also known as the butterfly effect, highlights how small events or decisions can trigger significant consequences, emphasising the need for proactive crisis preparedness and rapid response (Biswas et al., 2018; Turna, 2022).

Moreover, chaos theory introduces the concept of self-organising behaviours, suggesting that during crises, employees and systems may exhibit adaptive behaviours, either exacerbating or alleviating the situation. Understanding these emergent behaviours is vital for hotels, enabling them to harness positive responses while mitigating negative ones (Woods and Branlat, 2011). Empirical studies provide concrete evidence of the significance of interconnectedness in crisis management. Maditinos and Vassiliadis (2008) demonstrated that local crises can have global

effects on the hotel industry due to interconnectedness, allowing hotels to secure resources efficiently and mitigate negative consequences. Gensler et al. (2015) found a clear link between brand image interconnectedness and online consumer-generated product reviews during a crisis, emphasising the importance of actively managing online reputation for effective crisis recovery.

Therefore, chaos theory's concepts provide essential insights into crisis management practices in the hotel industry. By acknowledging the interconnectedness of factors, understanding the sensitivity to initial conditions, and recognising the potential for emergent self-organising behaviours, hotels can develop proactive strategies for crisis preparedness and response. These insights, supported by empirical studies, highlight the critical role of chaos theory in enhancing crisis management within the hotel sector, providing a foundation for more resilient and adaptive crisis responses (Mbengue et al., 2018; Buhalis and Leung, 2018; Maditinos and Vassiliadis, 2008; Gensler et al., 2015).

These empirical examples highlight how the interconnectedness of factors, both internal and external, plays a pivotal role in shaping crisis management practices within the hotel industry. Thus, we hypothesised that:

***$H_{01}$:*** *Interconnectedness of factors enhances crisis management practices in the hotel industry in Kenya.*

Empirical evidence from the hotel industry strongly supports the concept of sensitivity to initial conditions in crisis management. A study by Yu et al. (2022) analysed the impact of crisis response strategies on guest satisfaction and reputation during the COVID-19 outbreak. Hotels that promptly addressed guest complaints, especially on social media platforms, experienced fewer negative reviews and higher guest satisfaction ratings, preventing minor issues from escalating into significant crises. Ivkov et al. (2019) investigated natural disasters and hotel industry resilience, finding that hotels with comprehensive disaster preparedness training for staff responded more effectively during crises like hurricanes and earthquakes. Such preparedness reduced property damage, enhanced guest safety, and minimised business disruption, showcasing the profound impact of initial conditions, in this case, staff preparedness, on crisis management.

Additionally, Shahbazi (2023) examined crisis communication strategies during the COVID-19 pandemic, focusing on the tone, transparency, and frequency of hotel messages. Hotels that conveyed empathy and provided clear information at the pandemic's outset retained guest loyalty and booking intent, highlighting the long-term impact of initial communication decisions on guest relationships and business outcomes. These studies collectively underline the significance of understanding and managing sensitivity to initial conditions for effective hotel crisis management. Acknowledging the potential consequences of minor actions and decisions is crucial, as they can significantly influence guest perceptions, reputation, and business sustainability. Hence, these empirical findings support the hypothesis that.

***$H_{02}$:*** *The sensitivity to initial conditions positively impacts crisis management practices in the hotel industry in Kenya.*

Meanwhile, empirical evidence within the co-production perspective underscores the critical role of self-organising behaviours during crises and their impact on crisis management practices. One notable study by Tu (2022) investigated how self-organising behaviours from the co-production perspective influenced disaster relief during the COVID-19 pandemic. The study found that employees spontaneously collaborated and shared information within co-production to adapt to the evolving crisis and exhibited more effective crisis management outcomes. These self-organising behaviours helped hotels quickly implement safety protocols, communicate effectively with guests, and adapt to changing guest demands, ultimately contributing to better crisis resilience.

Moreover, a study by Daxenberger et al. (2021) explored the turbulent stability of emergent roles from the dualistic nature of self-organising knowledge co-production. The research found that individuals who exhibited self-organising behaviours, such as helping others evacuate or communicating effectively, played a crucial role in reducing injuries and panic during the crisis. These empirical examples highlight the real-world impact of self-organising behaviours on crisis management within the hotel industry. Consequently, we hypothesised that:

***$H_{03}$:*** *The emergence of self-organising behaviours positively impacts crisis management practices in the hotel industry in Kenya.*

## MATERIALS AND METHODS

### Sampling

The study identified 510 management personnel from a diverse range of star-rated hotels in Mombasa County, including 4-star, 3-star, and 2-star establishments based on data from the Tourism Regulatory Authority in 2020. To ensure a representative sample of 219 management staff for the study, a formula by Getu and Tegbar (2006) was used. Purposive sampling was employed to select star-rated hotels with relevant data, followed by a stratified random sampling method. This approach involved categorising the target population into departments and subcategorising management staff into managers, assistant managers, and supervisors. Within each stratum, 219 management staff were randomly chosen using a simple random sampling technique, ensuring a comprehensive representation of various roles within the hotel industry.

### Data Collection Process

The data collection process involved administering a questionnaire survey to assistant managers and supervisors working within the star-rated hotels in Mombasa County. The questionnaires were distributed and collected by the researcher and a team of research assistants, with respondents being responsible for self-completing the questionnaires. Once the participants had filled out the questionnaires, they were collected upon completion. Before commencing the data collection phase, the researcher conducted a comprehensive briefing session with the research assistants. During this briefing, the research objectives and requirements of the study were thoroughly explained, ensuring that all team members had a clear understanding of

their roles and responsibilities. Additionally, ethical principles and guidelines governing the study were emphasised, highlighting the importance of ethical conduct throughout the data collection process.

**Measurement of Variables**

In this study, we examined five variables. We conceptualised Chaos Theory Principles, including the interconnectedness of factors, sensitivity to initial conditions, and the emergence of self-organising behaviours, adapted from Bengue et al. (2018), as exogenous latent variables. Crisis management, assessed through crisis preparedness and planning, crisis response and communication, and crisis recovery and resilience, was conceptualised as the endogenous latent variable. The interconnectedness of factors was measured using eight indicators proposed by Dong (2023): network visualisation, degree of dependency, feedback loops, non-linearity, emergence, sensitivity analysis, resilience and robustness, and environmental and socioeconomic context. Sensitivity to initial conditions was assessed with five items: divergence of trajectories, exponential growth, Butterfly effect, non-periodicity, and fractal behaviour (Shaukat et al., 2023). The emergence of self-organising behaviours was measured using six indicators: adaptive responses, spontaneous pattern formation, local interactions, resilience to perturbations, feedback mechanisms, and hierarchical structure (Dresp-Langley, 2020).

**Data Analysis**

The causal effects of the Chaos Theory perspective on crisis management practices were analysed using Partial Least Squares Structural Equation Modelling (PLS-SEM). First assessment of the measurement model to ensure the reliability and validity of the latent constructs was done. This assessment evaluated the internal consistency of indicators (Cronbach's alpha), convergent validity (factor loadings and average variance extracted), and discriminant validity. Next, the structural model was examined to analyse the causal relationships between the latent constructs. PLS-SEM estimated path coefficients (regression coefficients) between the exogenous and endogenous latent variables. The significance and direction of path coefficients were assessed by testing the hypotheses. This test determined whether Chaos Theory principles had statistically significant causal effects on crisis management practices.

## RESULTS AND DISCUSSION

**Respondents Demographic Profile**

The study's participants were evenly distributed by gender, with 40.9% male and 59.1% female respondents, ensuring robustness and gender-neutral findings (see Table 1). Most respondents (45.5%) were 26-40, representing mid-career staff, while 22.2% were above 40, and 32.3% were aged 18-25. Notably, all participants had attained formal education, with 50.5% holding secondary qualifications and 44.4% possessing college qualifications. In terms of tenure, 53.5% of participants had worked for less than five years, indicating a relatively young workforce, while 24.2% had a tenure ranging from 6 to 10 years, and 22.2% had worked for over a decade,

suggesting a mix of experienced staff in the sample. This diverse representation across age groups and tenures enhances the study's comprehensiveness, providing a well-rounded perspective on crisis management practices in the hotel industry.

***Table 1: Respondents Demographic Profile***

| Profile | Category | **Frequency** | **Percent** |
|---|---|---|---|
| Gender | Male | 81 | 40.9 |
| | Female | 117 | 59.1 |
| | **Total** | **198** | **100** |
| Age in years | 18-25 years | 64 | 32.3 |
| | 26-40 years | 90 | 45.5 |
| | Above 40 years | 44 | 22.2 |
| | **Total** | **198** | **100** |
| academic qualification | None | 0 | 0.0 |
| | Primary | 10 | 5.1 |
| | Secondary | 100 | 50.5 |
| | College | 88 | 44.4 |
| | **Total** | **198** | **100** |
| Duration of employment | Below 5 years | 106 | 53.5 |
| | 6-10 Years | 48 | 24.2 |
| | Above 10 years | 44 | 22.2 |
| | **Total** | **198** | **100** |
| | **Total** | **198** | **100** |

**Descriptive Statistics of Latent Constructs and Associated Manifest Variables**

The descriptive statistics presented in Table 2 reveal that the hotel industry in Kenya demonstrated a moderate to a high level of interconnectedness, sensitivity to initial conditions, the emergence of self-organising behaviours, and crisis chaos management practices. The variations in scores and the presence of outliers, as indicated by kurtosis and skewness values, suggested areas of both strength and potential improvement in the industry's crisis management practices if hotels were to disentangle themselves from chaos occasioned by crises. The findings provide valuable insights for hotel professionals and policymakers to focus on specific areas for enhancing crisis preparedness, response, and recovery strategies in the face of dynamic and unpredictable challenges that often catch hotels off-guar

***Table 2: Descriptive Statistics***

| Construct/Indicator | | Mean | Std.Dev | Kurtosis | Skewness |
|---|---|---|---|---|---|
| Interconnectedness of factors | System Dynamics and Adaptability **(SDA)** | 4.10 | 1.01 | 3.58 | -1.94 |
| | Cyclical Influence Mechanisms **(CIM)** | 3.74 | 0.848 | 1.04 | -0.770 |
| | Contextual Sensitivity and Impact Analysis **(CSIA)** | 3.82 | 1.078 | -0.065 | -0.841 |
| Sensitivity to initial conditions | Dynamic Complexity Patterns **(DCP)** | 4.00 | 0.855 | 2.21 | -1.60 |
| | Butterfly effect **(BE)** | 3.17 | 1.234 | -0.741 | -0.321 |
| Emergence of self-organising behaviours | Structural Resilience and Feedback Dynamics **(SRFD)** | 4.10 | 0.996 | 4.06 | -2.05 |
| | Emergent Adaptive Phenomena **(EAP)** | 3.78 | 0.868 | 0.682 | -0.771 |
| Crisis Management | Crisis Preparedness and Planning **(CPP)** | 3.70 | 1.114 | -0.367 | -0.937 |
| | Crisis Response Management **(CRMP** | 3.58 | 0.825 | 0.443 | -0.466 |
| | Crisis Recovery and Resilience **(CRR)** | 3.74 | 0.696 | 3.22 | -0.935 |

**Model Validation**

The validation of the Partial Least Squares Structural Equation Models (PLS-SEM) in this study focused on assessing the proposed constructs using measures like composite reliability (CR), average variance extracted (AVE), and discriminant validity. Rigorous criteria, including CR values above 0.7 and AVE values exceeding 0.5, were employed to ensure model suitability and reliability. The study's constructs

exhibited high internal consistency (CR values above 0.7) and satisfactory convergent validity (mostly AVE values above 0.5), indicating that the items effectively measured the intended aspects. However, a slightly lower AVE value for Sensitivity to Initial Conditions suggested potential conceptual overlap with other constructs, emphasising the need for cautious interpretation of related findings. Overall, the results affirmed the reliability and validity of the measurement model, establishing a strong foundation for further analysis and interpretation of the study's outcomes.

***Table 3: Construct Reliability and Validity***

| Construct | Composite Reliability (CR) | Average Variance Extracted (AVE) |
|---|---|---|
| Crisis Management | 0.912 | 0.775 |
| Emergence of self-organising behaviours | 0.804 | 0.673 |
| Interconnectedness of factors | 0.906 | 0.762 |
| Sensitivity to initial conditions | 0.744 | 0.595 |

**Inner Model**

The inner model displayed in Figure 1 confirms that the variations in chaos theory principles—the interconnectedness of factors, sensitivity to initial conditions, and the emergence of self-organising behaviours, explained up to 65.7% of the variance in crisis management (R square = 0.657).

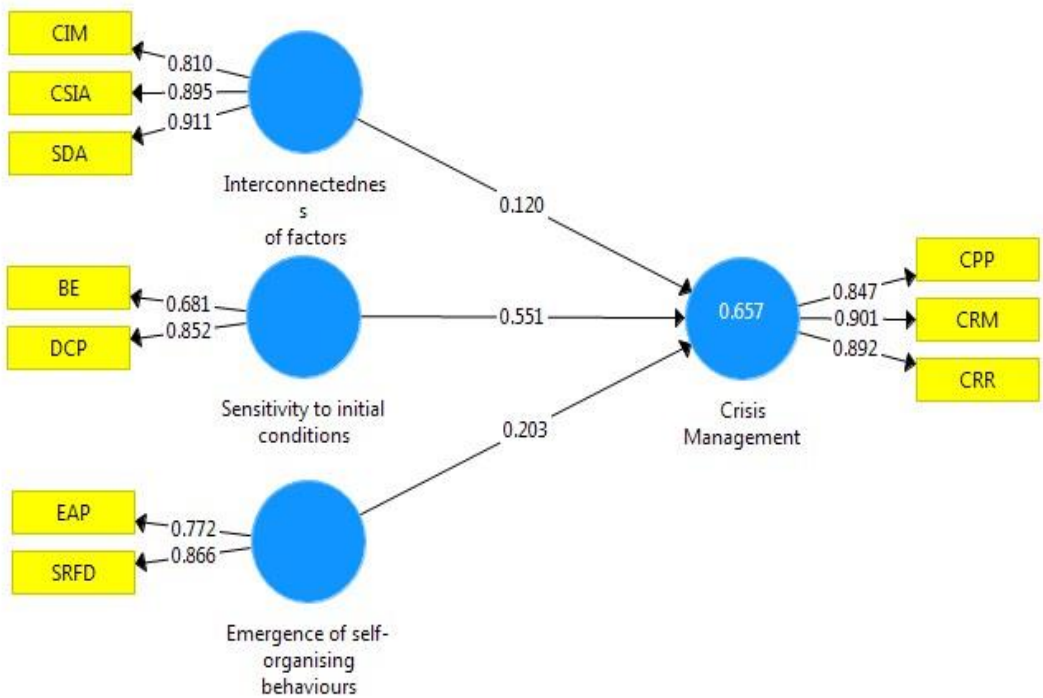


***Figure 1: Inner Model***

This indicated the substantial impact of chaos theory principles on crisis management practices within the hotel industry in Kenya. The inner model visually represents the relationship between chaos theory principles (interconnectedness of factors, sensitivity to initial conditions, and the emergence of self-organising behaviours) and crisis management outcomes. The significant portion of variance explained (65.7%) in crisis management practices signifies that these chaos theory principles play a fundamental role in shaping how hotels respond to and manage crises. This high level of explanation suggests a strong correlation between understanding and implementing chaos theory principles and the effectiveness of crisis management strategies.

This finding underscores the importance of embracing chaos theory as a guiding framework for crisis management within the hotel industry. Hotels that recognise and leverage the interconnectedness of various factors are sensitive to initial conditions, and foster self-organising behaviours among their staff, are better equipped to handle crises effectively. By acknowledging the complex and dynamic nature of crises, hotels can develop proactive strategies, enhance their adaptability, and improve their overall resilience in the face of unpredictable events.

## HYPOTHESIS TESTING AND DISCUSSION

### Interconnectedness of factors and crisis management practices in the hotel industry in Kenya

The first hypothesis of this research postulated that interconnectedness of factors enhances crisis management practices in the hotel industry in Kenya. The beta coefficient for Interconnectedness of Factors and Crisis Management was 0.120, indicating a positive effect (Table 4). However, the t-statistic of 1.415 and the p-value of 0.158 indicated that this relationship was not statistically significant in the original sample. Therefore, there was no sufficient evidence to support the hypothesis that interconnectedness of factors enhances crisis management practices in Kenya's hotel industry based on the available data.

***Table 4: Path Diagram***

| | Original sample (β) | Sample mean (M) | Standard Deviation (STDEV) | T Statistics ($\left\|\frac{O}{STDEV}\right\|$) | p Values |
|---|---|---|---|---|---|
| Emergence of self-organising behaviours → Crisis Management | 0.203 | 0.210 | 0.092 | 2.215 | 0.000 |
| Interconnectedness of factors → Crisis Management | 0.120 | 0.120 | 0.085 | 1.415 | 0.158 |
| Sensitivity to initial conditions → Crisis Management | 0.551 | 0.543 | 0.058 | 9.478 | 0.000 |

The absence of a significant impact of interconnectedness on crisis management practices highlights the necessity for hotel managers and policymakers to reassess their strategies. Cultivating interconnectedness among various factors is essential for extricating hotels from chaos during crises. Understanding the complexities of relationships within the hospitality sector, including supply chains and stakeholder interactions, as emphasised by Buhalis and Leung (2018), is crucial. However, deciphering these interactions during crises presents challenges. Cai et al.'s (2018) research underscores the need for adaptive strategies to manage interconnectedness during crises effectively.

Additionally, digital interconnectedness plays a pivotal role, particularly through online platforms and social media. Xiang et al. (2017) emphasise the impact of digital connections in shaping hotel interactions with guests and the community. These connections are vital for communication, reputation management, and resource coordination during crises. Chaos theory adds complexity, suggesting that inherently unstable and nonlinear interconnected networks exhibit emergent and unpredictable behaviors, as Khan et al. (2018) explored.

The lack of statistical significance in the relationship between interconnectedness and crisis management implies the necessity for clear approaches. Rethinking the traditional understanding of interconnectedness and embracing its nonlinear, emergent nature during crises is crucial. Additionally, qualitative methods such as case studies and in-depth interviews, capturing context-specific interconnectedness dynamics, become invaluable. These methods provide real-time insights, offering a deeper understanding of interconnectedness during crises. In essence, by acknowledging the multifaceted and nonlinear nature of interconnectedness and incorporating these insights into crisis management strategies, hotels can enhance their resilience in the face of chaotic situations.

**Sensitivity to Initial Conditions and Crisis Management Practices in the Hotel Industry in Kenya**

The second hypothesis of this research postulated that sensitivity to initial conditions enhances crisis management practices in the hotel industry in Kenya. The beta coefficient for Sensitivity to Initial Conditions and Crisis Management was 0.551, indicating a strong positive relationship (Table 4). The t-statistic of 9.478, with a statistically significant p-value of 0.000, provided robust evidence supporting the hypothesis. This finding suggests that higher sensitivity to initial conditions is significantly associated with enhanced crisis management practices in the hotel industry in Kenya.

This finding aligns with existing discourse on crisis management in the hotel industry. Scholars have emphasised the critical role of anticipating and effectively responding to initial conditions in crisis scenarios. Research by Jiang et al. (2019) highlighted that hotels with heightened sensitivity to initial conditions, especially concerning guest feedback and service quality, can disentangle themselves from chaotic situations by promptly identifying and addressing potential issues before they escalate into crises. Similarly, studies by Williams et al. (2017) have explored the impact of early detection and rapid response in crises, indicating that hotels displaying

sensitivity to initial conditions can implement timely interventions, mitigating the adverse effects of crises on guests and operations.

Therefore, the findings of this research affirm the importance of sensitivity to initial conditions in enhancing crisis management practices within the hotel industry. By aligning with the existing discourse on crisis management, these results emphasise the need for hotels to focus on proactive strategies that enhance their sensitivity to initial conditions, ultimately strengthening their ability to disentangle themselves from chaos scenarios, navigate and mitigate the challenges posed by crises.

**Emergence Self-Organising Behaviours and Crisis Management Practices in the Hotel Industry in Kenya**

The study's third hypothesis posited that higher levels of self-organising behaviours enhance crisis management practices in the Kenyan hotel industry, a claim supported by a positive beta coefficient of 0.203 (Table 4). The accompanying t-statistic of 2.215 and a significant p-value of 0.000 provided robust evidence, establishing the statistically significant relationship between self-organising behaviours and crisis management. This result aligns with existing literature in the hotel industry, emphasising the importance of fostering self-organising behaviours among staff during crises.

Scholars such as Reddy et al. (2020) and Wang and Ritchie (2010) have emphasised the adaptive capacity of hotels, underlining the significance of self-organising behaviours among employees. Reddy et al. (2020) explored post-conflict tourism recovery and found that hotels encouraging self-organising behaviours adapt swiftly to evolving circumstances, facilitating efficient crisis responses. Wang and Ritchie (2010) showcased that hotels promoting self-organising behaviours exhibit higher resilience in crises, emphasising the importance of staff autonomy and decision-making abilities.

Furthermore, Durugbo Al-Balushi's (2023) work highlighted the role of emergent behaviours in crisis communication strategies. Hotels fostering spontaneous, self-organised communication patterns effectively convey information, ensuring transparency and building trust during crises. Park and Kim (2018) reinforced the significance of organisational structures nurturing self-organising behaviours, enabling hotels to tap into their employees' collective intelligence and creativity for innovative crisis management solutions.

These findings underscore the importance of promoting self-organising behaviours within the hotel industry. The study aligns with existing discourse, emphasising the need for hotels to cultivate a culture encouraging autonomy, collaboration, and adaptability among staff. By doing so, hotels can harness the emergent capabilities of their workforce, leading to more resilient crisis management practices and enabling them to navigate chaotic situations effectively.

## CONCLUSION AND RECOMMENDATION

Hotels in Kenya are often getting entangled in chaotic situations arising from crises. However, by leveraging chaos theory principles, including the interconnectedness of factors, sensitivity to initial conditions, and emergence of self-

organising behaviours, hotels in Kenya have an opportunity to engage in crisis management practices that can disentangle them from these chaotic situations. While the interconnectedness of factors did not significantly impact crisis management practices, sensitivity to initial conditions and the emergence of self-organising behaviours significantly enhanced crisis management practices. Therefore, hotels can cultivate a culture encouraging autonomy, collaboration, and adaptability among employees through these chaos theory principles. By harnessing the emergent capabilities of their workforce, hotels can strengthen their crisis management practices, enabling them to effectively navigate chaotic situations and disentangle from crises in the ever-changing hospitality landscape.

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