

DEMONSTRATING RESILIENCE AS A UNIVERSITY

By

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Table of Contents

Executive Summary.....	4
Introduction	7
Organizational Context	10
Problem of Practice.....	12
Literature Review	15
Higher Education.....	16
Crisis Management	18
Resilience	19
Measurement.....	21
Leadership.....	23
Conceptual Framework.....	26
Research Question	33
Project Design	34
Data Collection.....	36
Quantitative Survey	36
Qualitative Interviews.....	43
Data Analysis.....	46
Quantitative Survey Analysis	48
Qualitative Survey Analysis.....	50
Findings	52
Recommendations	64
Discussion and Conclusion.....	69
References	72
Appendix A.....	87
Appendix B	93
Appendix C	113
Appendix D.....	144

Executive Summary

This capstone project was created to answer the following question: How does a university respond to a crisis event?

The focal site for my study was Missouri State University (MSU) in Springfield, Missouri, the state's second-largest university in terms of enrollment. The lens through which this study was conducted focused on how the school responded to the COVID-19 pandemic. While the school suffered events in the past (typically weather-related) that would cause a temporary shut-down, the institution had never sustained a long-term incident that would challenge the administration, faculty, staff, and students to move to an entirely different type of environment with regards to the location, access, and technology. By adopting articulated and rehearsed practices, Missouri State hopes to have a quicker and more inclusive approach when responding to future crisis events. Even though the historic nature of the COVID-19 pandemic is unprecedented, MSU also hopes to become more resilient in its future responses to small and large-scale events.

A conceptual framework was identified that unified crisis management and resilience response tactics to help understand and assess the effectiveness of Missouri State's structures and practices related to their crisis event response. A survey was created and sent out to three separate groups within the university: Administration, faculty, and staff. From the responses received through the initial survey, a sample of respondents was selected for semi-structured, qualitative interviews conducted via remote access due to the continued threat of the pandemic at the time of the interviews. This research intended to understand the perceptions from various stakeholders about the school's response and obtain insights that could be analyzed and integrated into

changes for the school's future approach to crisis events. In addition, the findings may be applicable for other universities of similar size and composition.

It was evident in the initial scoping conversations that university leadership was interested in having the school become a more resilient institution. Therefore, the lens through which I conducted my study heavily integrated aspects of resilience in organizations. Four findings came out of the research project and included the following:

1. Missouri State has a split in the functional relationship between the administration and faculty that hinders communication, collaboration, and the potential for easily enacting change. Survey and interview data highlighted the differences in execution and perceived success of the university during the pandemic response.
2. Missouri State's key stakeholders did not consistently feel that the university was well-prepared for a crisis event. Survey and interview data highlighted the lack of a practiced plan and led to a perception of ad-hoc responses during the event.
3. Missouri State's key stakeholders did not feel that the crisis response adequately included a wide range of stakeholders. Survey and interview data noted the lack of inclusion in planning and response approaches during the pandemic, including the exclusion of certain groups with specific knowledge about at-risk students and areas of the school.
4. Missouri State did not have indicators in place that were monitored to indicate risk or demonstrate operational success. Without having a set of published and monitored indicators, there is a weakness in addressing and acknowledging potential risks. In addition, there is no way to monitor operational improvement or a return to normality without similar indicators.

As a result of the findings, three recommendations for Missouri State University's future resilience and crisis management response emerged from the research findings:

1. Missouri State should create an inclusive group to determine an ongoing, resilient approach for crisis event response. Having inclusive representation is key to designing and implementing resilient processes for the school to follow in the future.
2. Missouri State should create an inventory of Key Risk Indicators and Key Performance Indicators for their operational and resilience efforts. These indicators will allow the school to better monitor and predict risk and monitor and drive the success and improvement in operations.
3. Missouri State should perform regular tests of their crisis response plans to evaluate effectiveness and readiness. The school should strive to continue refining and updating a plan based on the results of comprehensive testing.

Introduction

The unit of analysis for this research is Missouri State University (MSU) in Springfield, Missouri, and the capstone inquiry was focused on identifying how a university responds to a crisis event. The desired outcome of this capstone study was to determine the findings of the research based on the selected frameworks and their alignment with the data collected from Missouri State and to create recommendations designed to help guide the administration in their desire to have their organization become more resilient. As the second-largest university in Missouri with a student population of over 24,000 students and approximately 2,000 faculty, staff, and administration employees, the results of this research may also benefit universities with similar demographics. The findings of this project should provide insight into the strengths and weaknesses of resilience efforts, leading to improvements and changes that will help ensure a better chance of survivability for similar organizations.

Research on crisis management and resilience before 2020 was mainly focused on the processes and procedures to guide an organization through a crisis event. Defined as a “low-probability, high-impact event that threatens the viability of the organization” (Pearson & Clair, 1998), a crisis event typically was viewed as having a defined end--a time when things in the organization would return to normal. Additionally, the breadth and length of the pandemic event were more severe than most typical crisis response plans had envisioned. The standard disaster recovery approach did not work, and organizations needed to consider different processes to ensure their continued operations.

The culture of academic institutions, with their biases towards rigidity, territorial structures, and slow pace of change (LeBlanc, 2018; Savoca & Bishop, 2020) makes crisis management response more difficult in these environments. Universities have organizational silos or areas of specialization. These silos “prevent communication, confuse roles and responsibilities, and limit the sharing of information, expertise, and resource across divisions, frequently obstructing change” (Savoca & Bishop, 2020). When academic institutions are siloed and are experiencing a crisis event that requires a quick response, the ability to be nimble and make decisions without consensus-building activities, meetings, and committees can be challenging to achieve (Brennan & Stern, 2017). The pandemic crisis challenged university response plans because of the rigidity of their organizations and the cultural and process changes that were brought about due to the duration of the event (Spicer, 2020).

My capstone inquiry included scholarly literature that discussed the movement from traditional crisis management, with its step-by-step instructions to follow during an event, to a paradigm that focused on creating organizational structures and processes that allow the organization to be more resilient. By implementing more resilient processes and structures, the organization can adjust to any additional threats, pivoting and changing direction, not relying on a structured crisis management approach as they would have already adjusted to avoid the potential crisis event. The more resilient an organization becomes, the less the need for structured, scripted crisis management solutions (Williams et al., 2017). Thus, there is a more substantial need for crisis management in less resilient organizations. The literature succinctly stated it in saying that “the goal of crisis management is to bring a system back into alignment...to bring things back into equilibrium as soon as possible” (Williams et al., 2017, p. 735). But

when a balance cannot be easily achieved due to the complexity or duration of the crisis event, such as during the COVID-19 pandemic, this leads to the necessity of migrating towards a more resilient approach to managing crisis events. “Established crisis management responses can be ineffective, and business continuity can be severely disrupted as problems occur over multiple domains and manifest in unfamiliar ways” (Bryce et al., 2020, p. 881). The COVID-19 pandemic was a crisis event unprecedented in scope or duration and exposed the limitations of organizations that relied solely on crisis management as their approach to managing the response. With that in mind, additional research was performed around the linkage between these two approaches and how they might interact. The study for this capstone was based on the idea that if it were determined that Missouri State was operating with a more crisis management thematic approach, proposed recommendations could be tailored to help move towards a more resilient system.

Organizational Context

Missouri State University (MSU) is the second-largest university in Missouri, with over 24,000 students. The university's main campus, founded in 1905, is situated in the southwest corner of the state in Springfield, Missouri. MSU's Total Enrollment has grown by six percent over the past five years growing from 22,834 to 24,126, with approximately 86% of those students coming from the state of Missouri (*Missouri State University, 2021b*).

Missouri State operates in a governance system with the school's president, Dr. Clif Smart, reporting directly to the Board of Governors (Appendix A – Figure 22). In turn, there are thirteen people, including the Provost, who report directly to the President, and nine people reporting to the Provost. The President, the Provost, and the Associate Provost were the main stakeholders for this capstone project. Their goal was to understand how their organization could become more resilient in responding to future crisis events.

The University Safety Office sits under the auspices of the Vice President for Administrative Services, one of the thirteen people who report to President Smart. This office maintained a collection of emergency action plans and policies before the COVID-19 pandemic. However, these existing crisis management practices were related to short-term disasters such as weather-related events and were not designed to address a situation like the pandemic. Each one was no larger than one page, and each described a set of steps with a clear beginning and end, such as taking cover for a tornado and only leaving shelter when the tornado warning expired.

With the COVID-19 pandemic reaching the United States in January of 2020, the university students and faculty began to receive updates from President Smart's office. From a message on January 29, 2020, stating that all university travel to China was suspended, each update showed a growing level of concern and uncertainty about the seriousness of the pandemic. When the pandemic began to rapidly spread in February of 2020, the administration feared that the school might be forced to close. On Thursday, March 12, 2020, Missouri State decided to cancel classes for the next day and start Spring Break one day earlier than scheduled. Then, during the week of March 16, 2020, numerous changes and alerts were sent from the President's office. They included the decision to move all classes to remote learning on March 30, 2020, and an announcement of the first Missouri State student case of the virus was sent on March 21, 2020, leading to the ultimate closure of the campus on March 27, 2020.

The update of March 27, 2020 included many topics ranging from guidance on how to move belongings off-campus to how to drop a class and receive reimbursement. Included in the direction were hints to the unplanned activities addressed by the school's faculty, staff, and administration. From the topic of negotiating with a food service vendor for a refund to the solicitation of ideas for how to celebrate graduates since there would be no in-person graduation, there were indicators that there was no emergency action plan in place for an emergency of this magnitude.

The findings and recommendations of this capstone project are meant to inform and guide the stakeholders in how they can update and change processes and structures at the school to be better ready for future crisis events.

Problem of Practice

The capability of an organization to adapt and recover from crisis events is key to the continued success and livelihood of the organization itself. Lessons learned through this research can help other similar organizations. This guidance includes determining where organizations want to place themselves in terms of maturity of resiliency and, in turn, determine which aspects of resilience are crucial and should be implemented, changed, or deleted based on the desired end-state. With the idea that the “pandemic is likely to permanently change organizations and organizing practices” (Stephens et al., 2020), the recommendations and guidance around this topic of resilience are timely and help address a need within the academic and operational community.

This capstone study's problem of practice is to understand how Missouri State University responded to the crisis event of the COVID-19 pandemic. Interviews with the President, Provost, and Associate Provost of Missouri State University included concerns about the school's ability to react to the pandemic and quickly change direction when new aspects of the pandemic arose and appropriately address the totality of how the virus affected their institution. Missouri State was not alone in its concerns, as the COVID-19 pandemic challenged academic institutions in unique ways. The duration of the event, the shift in teaching modes, and the health and safety aspects of both teachers and students tested school leadership and administration at unprecedented levels (Keown et al., 2021). Missouri State's leadership was very keen on understanding the problems and potential solutions related to how an academic institution could respond to similar events in the future.

The physical and mental toll on people during the pandemic, including those in academia, was profound (Vinkers et al., 2020). Many organizations are now seeking ways to be better prepared for future events, be able to change course during the event if necessary, and survive and thrive while addressing the needs of their stakeholders (Mayo et al., 2020). Missouri State is no exception, and this is what led to a desire to create processes and practices that allow for a more flexible and resilient approach, such that the organization's responses to unplanned and planned events are less disruptive and more adaptive in the future. This change in response, in turn, will help to remove stress and uncertainty during times of crisis (Ortiz-de-Mandojana & Bansal, 2016).

When the severity of Covid 19 became a reality, Missouri State quickly put practices, policies, and organizational structures into place to address the pandemic. The rapid growth of the pandemic during March of 2020 and the uncertainty of the duration of the event had necessitated that the school extend Spring Break for a week as a pivot to a completely remote teaching environment. The event also demonstrated that their emergency action plans had been limited in scope since they had no plans that covered events that stretched beyond a few days. While there would still be a need for guidance during those clear-cut events, the President and Provost of the school were united in their desire for a change in organizational structure or process that would allow them to handle another event like the COVID-19 pandemic. The speed of change required by the pandemic revealed that they, along with other institutions, need to become resilient to help ensure the institution's survival during future events (Ruiz-Martin et al., 2018).

While not typical for a large state university like Missouri State, the issue of organizational survival has not been unheard of in higher education. Since 2016, there have been over 60 colleges or universities that have been forced to cease operations. These closures have been attributed to a “pressure to lower tuition, stagnating state funding and a shrinking pool of high school graduates [that] has strained many institutions’ bottom lines and questioned their long-term viability”(Higher Ed Dive, 2021). In Missouri State, the school has seen its state funding drop seven percent over the past five fiscal years (\$85.2 million in 2016 to \$79.2 million in 2020) (Missouri State University, 2021c). During that same time, the number of high-school graduates in Missouri, which provides the most significant percentage of incoming Missouri State first-year students, has declined nearly eleven percent (21,833 in 2016 to 19,528 in 2020).

Looking at these continuing challenges with funding and enrollment and coupled with the challenges faced with the COVID-19 pandemic, Missouri State’s leadership is determined to find a “better way” to address similar problems in the future. The goal of the capstone study will be to research and determine areas of weakness in Missouri State with regards to their response to the COVID-19 pandemic and make recommendations that will help them towards a more resilient approach to future events and challenges.

Literature Review

Organizations have historically treated crisis management of events with a short-term, reactive perspective (Crandall et al., 2010) or as stand-alone pursuits that are not a part of their overall organizational effectiveness and learning practices (Roux-Dufort, 2007). Organizations tend to pivot to a different operating model during a crisis event and then “return to normal,” neglecting to change their organizational processes with lessons learned from the crisis response. But what the COVID-19 pandemic has exposed is the frailty of these systems that were typically only created to bridge a limited-duration emergency event. The pandemic arrived in the United States in early 2020, as per the best estimates, and the variants of the COVID virus continue spreading as of the writing of this report. It is far from the short-term crisis that organizations generally expected. Resilience is a more mature approach than traditional crisis event management (Adini et al., 2017). Some have theorized that the topic of resilience and analysis on the subject could be grouped into four categories: management of internal resources, management of external resources, management of static processes related to resilience, and management of dynamic processes that are related to unforeseen events (Annarelli & Nonino, 2016). I have narrowed the scope of my research to focus on the management of internal resources (administration, faculty, and staff) and processes (including existing policies and procedures) as access to external resources of Missouri State (including students) was not available during this study due to confidentiality requirements and pandemic restrictions.

The literature associated with crisis management and resilience is broad, so the research direction for this study began focusing on higher education.

Higher Education

The structure and governance composition of a university can present unique challenges from a crisis management perspective. The literature about higher education talks about the rigidity and slow pace of change that is typical within institutions (Savoca & Bishop, 2020). This structure tends not to lend itself to the agility and need for quick changes in managing crisis events (LeBlanc, 2018). “Colleges, even in the best of times, often struggle to re-position themselves to offer a more relevant curriculum in a fitting delivery mode” (Mironko & Sutyniec, 2020, p. 73). The process to change curriculum is typically very long, taking years to implement. And that process involves obtaining agreement from multiple university areas and typically includes budgeting and technology changes (Mironko & Sutyniec, 2020). But that process also usually takes place during regular times. And the COVID-19 pandemic is not a standard time, making the process even more difficult.

The wide breadth of university stakeholders makes it difficult to create comprehensive plans (Mitroff et al., 2006). Identifying the cognitive experts and stakeholders that should be involved in response planning and actions, ensuring that stakeholders know their roles during the response, and confirming that communication methods are in place and working correctly are just as important in an academic setting as they are in any other organization facing a crisis (Beggan, 2011).

The literature concludes that strategies mirror those needed in other siloed organizations, where sensemaking and communication are vital to reaching across the organization's federated portions (Savoca & Bishop, 2020). Also key to being successful in resilience is agility and the ability to be flexible in trying, changing, and reintegrating changes into the processes of restoration and response (Clear & Asgarkhani, 2011).

The literature around higher education shows that it can be a complex environment that requires strong leadership and integrated and inclusive responses to the challenges faced (Brennan & Stern, 2017; Mitroff et al., 2006; Savoca & Bishop, 2020). This complexity still leaves the question of a preferred approach on how an organization like a university should respond to a crisis.

Research on how higher education institutions deal with crises and demonstrate resilience revealed a lack of agility in typical approaches that led to Missouri State's problems during those early months. For example, Brennan & Stern (2017) found several topics related to the inability of a university to address crisis events efficiently. The culture of an academic institution typically relies on committees, collaboration and socialization, and a thorough analysis of the problem or question at hand before engaging or determining a course of action. However, effective crisis management needs quick decisions based on sometimes inaccurate information without the time to build consensus before enacting decisions (Brennan & Stern, 2017). A meta-study on the topic of crisis management reveals three common themes related to the response to crisis events: 1) crisis management as a normative and staged activity to restore equilibrium, 2) the role of leaders in crisis management, and 3) the importance of crisis management teams (Williams et al., 2017). A further review of the literature shows that

these aspects of crisis management often align directly with elements of resilience in organizations. For example, Kapucu and Khosa (2013) discuss how resilience and preparedness characteristics need to permeate an institution's culture for their crisis management response to be adequate (Kapucu & Khosa, 2013). The typical crisis management approach of higher education, documented in research, led to a literature review to determine the differences between how an organization may use an approach that focuses on crisis management versus one that utilizes a more resilient approach.

Crisis Management

Literature related to crisis management shows that the practice is limited in scope, is typically focused on a universe of known events, and is therefore considered an isolated discipline that concentrates only on analyzing exceptional situations (Roux-Dufort, 2007). The shortcomings of utilizing a crisis management approach narrow in scope and become isolated from addressing other types of events in the organization, amplified when there are shortcomings and imbalances within the response plan (Roux-Dufort, 2007). Traditional crisis management responses are only activated when the actual crisis event occurs. If the techniques are not tested before activation, the plan's shortcomings are never exposed before the event. This inability to plan for each contingency means that an organization can never have a comprehensive set of strategies to address every scenario but focus on those more typical to their environment (Reilly, 1993). As research suggests, "developing plans that work for the endless array of complex, chaotic and destructive scenarios that arise from interlocking and often mutually dependent infrastructures may be all but impossible" (Boin &

McConnell, 2007). For a pandemic response, not even hospitals and health care providers were investing in the infrastructure and resiliency needed to address a global catastrophic scenario like COVID-19 before it occurred (Osterholm, 2005).

Organizations, such as the partner for this study, followed suit in not creating plans for this non-typical event and acted as if a pandemic akin to the 1918 Spanish Flu outbreak was an anomaly and would never happen again (Kamradt-Scott, 2020).

Resilience

Literature shows that resilient operations and responses are more desired over typical crisis management plans for non-typical crisis events (Ruiz-Martin et al., 2018). Only flexible organizations with the agility to adapt quickly can survive crisis events (Gacs et al., 2020; Lengnick-Hall et al., 2011). The behaviors that are typically found within a resilient organization include such aspects as preparing, ensuring that the right people are involved, addressing the emotional needs of stakeholders, restoring, and ensuring that there is a process for taking in information to update and continually adjust processes (Brennan & Stern, 2017; Williams et al., 2017). But the literature on resilience tends to focus on different methods and approaches regarding how to define and measure it within an organization. As an example of the different approaches and to evaluate alternatives for a conceptual framework, the table in Figure 1 (Hillmann & Guenther, 2021), which identifies five different pieces of literature that discuss the topic of resilience, was reviewed. Williams et al. (2017) goes deeper and compares it against the crisis management approach.

Review	Key focus
Williams <i>et al.</i> (2017)	Integrates two research streams and develops a framework related to the key themes of crisis and resilience research; defines capabilities for durability, organizing and adjusting, responding to major disturbances, and a feedback loop from these experiences.
Linnenluecke (2017)	Focuses on historical development of resilience in business and management literature; identifies five streams of literature based on a Histicite-analysis.
Limnios <i>et al.</i> (2014)	Develops a typology for organizational resilience; authors show that resilience can have desirable and undesirable aspects.
Bhamra <i>et al.</i> (2011)	Reviews the literature on resilience in the context of organizations and identifies the ecological perspective as most prominently reflected in the literature; based on that they define resilience for organizations.
Erol <i>et al.</i> (2010)	Reviews the literature and conceptualizes resilience with the focus on concepts of ecology and systems; authors aim to provide a holistic definition of resilience.

Figure 1 - Key Focuses of Resilience Literature (Hillmann & Guenther, 2021).

Resilience has been defined variously as a capacity to learn and act when you do not know in advance what will be happening (Linnenluecke, 2017) or the amount of stress that a system can take and still survive (Mamouni Limnios et al., 2014). Bhamra et al. (2011) noted that while many definitions existed, little research and literature existed on how an organization could achieve a level or degree of resilience. Erol et al. (2010) suggest that to understand resilience, you need a methodology for measuring it, thereby laying the groundwork by looking at measurements currently to determine how resilient you are in the future when an event occurs (Erol et al., 2010). However, despite all the definitions, the ultimate objectives remain the same: survive, adapt, and flourish (Bhamra et al., 2011; Erol et al., 2010; Linnenluecke, 2017; Mamouni Limnios et al., 2014; Williams et al., 2017). These objectives require attention to the structures, processes, and interactions that occur within the organization.

The review of literature related to crisis management and resilience showed that there are distinct differences. From the Roux-Dufort (2007) definition of looking at crisis management as an approach where only the exceptions are managed (Roux-Dufort,

2007) to the Boin and McConnell (2007) article in which they discuss the limits of the crisis management approach and advocate for moving to a more resilient approach (Boin & McConnell, 2007), the literature focused on the distinction of a crisis management approach being geared towards limited-term events management, while resilience was defined as being a more dynamic approach that was not time delimited (Boin & McConnell, 2007; Mamouni Limnios et al., 2014; Roux-Dufort, 2007; Williams et al., 2017). The literature related to resilience also includes the theme of a measurement component that would allow for evaluation and growth out of the approach to manage crisis events (Erol et al., 2010; Jain et al., 2018; Mamouni Limnios et al., 2014).

Measurement

Erol et al. (2010) emphasize a need to have well-defined quantitative metrics and a collection and evaluation plan to determine an organization's level of preparedness and resilience. By collecting data, creating a baseline, and then monitoring the direction and trend of the indicators against the baseline, an organization can predict an upcoming occurrence of a risk and put resilience measures into action (Shi et al., 2018). The literature related to resilience discusses the need for metrics and indicators that can be used to monitor progress and warn of emerging risks (Henry & Emmanuel Ramirez-Marquez, 2012; Jain et al., 2018). There is an inherent desire for an organization to understand where they are in their response and know if they are on target to achieve their desired goals. But in the case of resilience, the event may not lead an organization to return to where it was before the event. A resilient organization may be able to emerge more productive than before. The structures may change, and the more

adaptive organizations will continue to function and thrive in their new environment (Dalziell & McManus, 2004). The chart in Figure 2 shows the difference between an organization that returns to normal (recovers) versus one that achieves a higher output level from its resilient response.

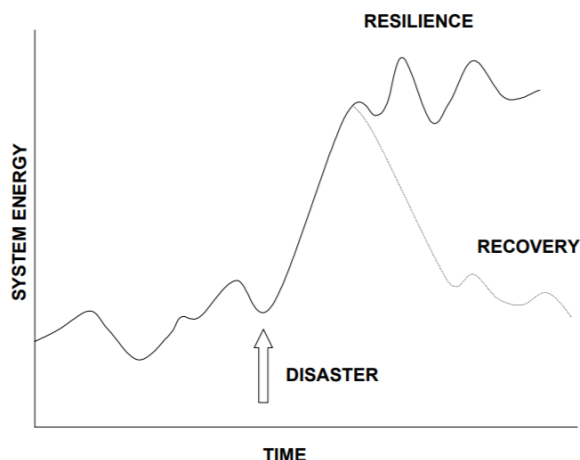


Figure 2 - Resilience versus Recovery (Dalziell & McManus, 2004).

Organizations that are driven to improve performance typically align metrics to goals that allow them to track the status and performance of their organizations (Bauer, 2004). The literature around resilience metrics discusses the need for consistency in the approach and the types of indicators utilized in monitoring and measuring resilience (Mamouni Limnios et al., 2014). Erol et al. (2010) addressed the importance of selecting proper variables to monitor resilience, but how difficult it is for non-material science processes (Erol et al., 2010). In material science processes, there are tangible inputs and outputs that can be seen and easily measured. But in the non-material sciences, such as those that deal with psychology, emotions, and leadership, the ability to easily identify and measure indicators can be more problematic. Without the ability to see or

touch the inputs and outputs from these processes, subjectivity raises the risk of selecting items to monitor that do not fully measure the key indicators (Erol et al., 2010). But the need for establishing a baseline or benchmark of critical metrics, monitoring their trends, and reacting is key to becoming a resilient organization (Wood et al., 2019).

Lastly, a fundamental tenet behind every organization, whether they utilize a resilient or crisis management approach, is its leadership. Leadership traits such as sensemaking, sense-giving, structuring roles (Weick, 1993), communication (Demiroz & Kapucu, 2012), leading preparation, and instilling a process for learning (Brennan & Stern, 2017) are fundamental. They must be operating correctly at a foundational level for resiliency processes to work and mature.

Leadership

The literature related to crisis management and resilience included passages associated with the leadership of an organization. However, leadership in crisis management was typically centered on the post-crisis event, where the leader would take charge to lead the organization back to viability (Williams et al., 2017). But on leadership in a resilient organization, the literature focuses on building connections between parts of the organization and enabling individuals to quickly identify potential crises and act *before* the event occurs (Williams et al., 2017). The ability of an organization to become and remain resilient is dependent on the leadership of the organization embracing the resilient approach, championing it, and leading the change of an organization to help foster a culture that accepts this approach in managing crisis events. Literature has discussed the linkage between leadership and crisis

management and how it is the leadership's responsibility to lead an organization through a crisis to return to normal (Demiroz & Kapucu, 2012). By having a leader practice sensemaking and sense giving and allowing virtual roles to take charge when needed, leadership that follows a crisis management approach reacts and guides during the event (Christianson et al., 2009; Weick, 1993; Weick et al., 2005). Additional literature states that this linkage should go further. The organization should help develop the leaders who embrace and reinforce this approach while also ensuring and fostering the employees' resilience and overall organization (Ledesma, 2014).

The literature links resilience and leadership, stating that "the survival of an organization during a crisis is dependent on the resilience of its members, as well as its leadership" (Teo et al., 2017, p. 136). Further, the literature identifies the need for organizational leaders to make quick decisions on essential topics and lead change management during a crisis event as key to success (Pearson & Clair, 1998; Teo et al., 2017).

The guidance from the leadership of an organization must extend to all stakeholders and ensure clear and sure direction during the event. In times of crisis, the attributes of sensemaking and sense-giving associated with leadership are magnified and necessary (Christianson et al., 2009; Weick, 1993). And the organization's leadership will need to ensure that all stakeholders are engaged and communicated to help ensure the organization moves in the same direction toward an appropriate response (Demiroz & Kapucu, 2012). There must also be a commitment and message from the organization's leadership that can encourage participation from all areas of the

organization and can help serve to help increase the likelihood of positive outcomes through the resilience efforts (Brennan & Stern, 2017; Kapucu & Khosa, 2013).

Conceptual Framework

With a focus on evaluating Missouri State's response to the COVID-19 pandemic, this capstone research centered on the ideas of crisis management and resilience and the desire of the organization to mature towards a more resilient approach. Vogus and Sutcliffe (2007) define resilience as "the maintenance of positive adjustment under challenging conditions such that the organization emerges from those conditions strengthened and more resourceful" (Vogus & Sutcliffe, 2007, p.3418). Key to that terminology is the word "adjustment": a course correction or change in process that allows the organization to steer away from crisis events. Not every organization will evade an event in the future; unplanned events can still cripple an organization. But if they have embedded resilient practices into the organization's culture, the effects may not be as severe. Research shows that organizations that embrace resilient practices have shown higher survivability rates along with higher long-term growth (Ortiz-de-Mandojana & Bansal, 2016).

Williams et al. (2017) proposed that there are "capability endowments" within the processes of a resilient organization that must be developed and matured for the organization to be considered resilient. There are specific capabilities that an organization must invest in, train, and become proficient in so that the organization's response to adverse crisis events can be managed in a resilient fashion (Williams et al., 2017).

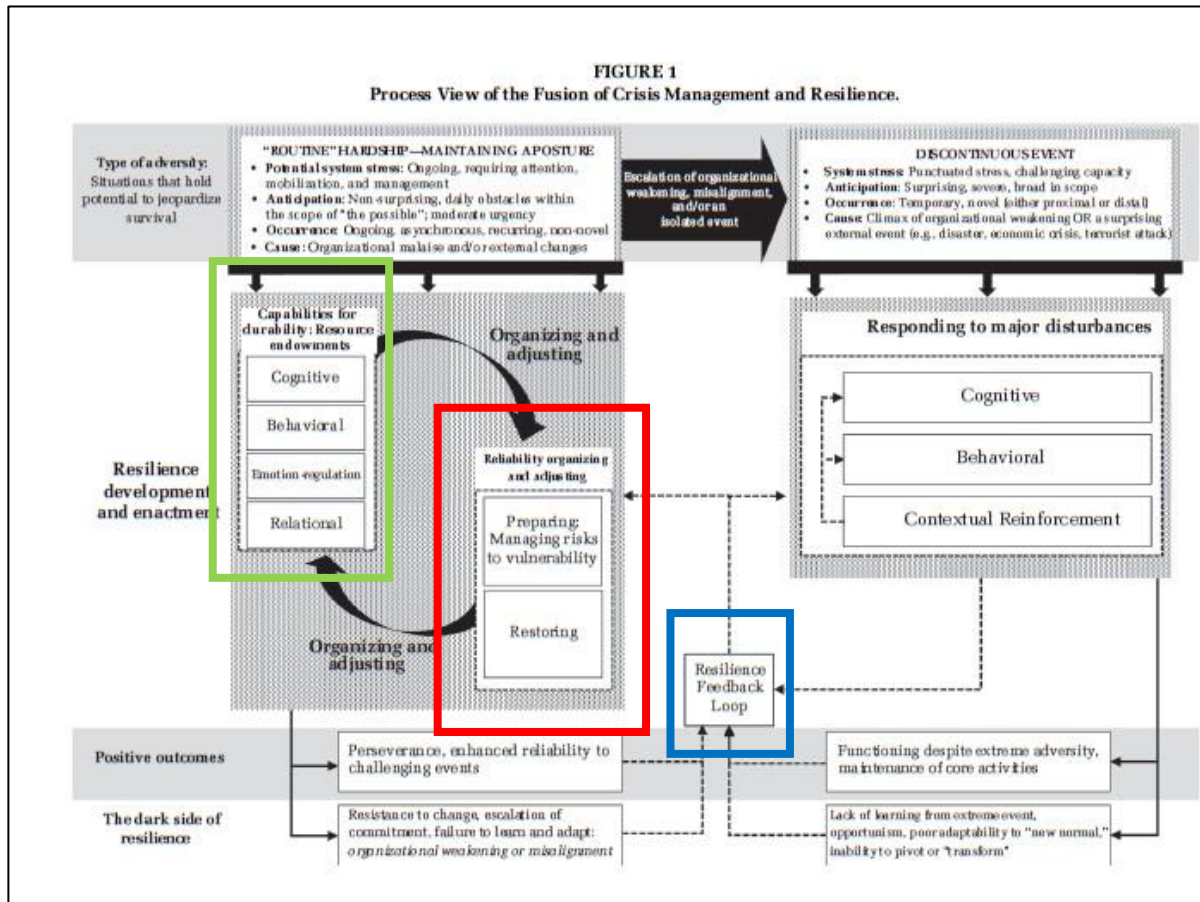


Figure 3 - Conceptual Framework (Williams et al., 2017).

The first capability in Williams et al.'s framework associated with resilience (within the green box on Figure 3) is **cognitive** and speaks to a need to have the right people in the correct positions of an organization to make the right decisions. The organization must be comprised of individuals with deep knowledge and expertise to act quickly and resiliently. This need for expedited decisions also requires that these same stakeholders be utilized during crisis events and depended on to execute the appropriate response. Speed and agility are critical to a resilient reaction. Having people with the proper cognitive capabilities helps ensure they can process their area of expertise with the contextual aspects of the crisis event. This deep knowledge and

expertise allow for the cognitive input to use sensemaking and inform the response plan and integrate feedback information from the lessons learned from the response into a continual improvement process that is also part of a resilient organization (Weick et al., 2005).

The framework's **behavioral** capability deals with the organization's operating processes, such as how people perform their daily work tasks and share information. (Williams et al., 2017). Behavioral capabilities also include understanding the work tasks embedded within an organization's structure, activities, and processes (Williams et al., 2017). Included in these work tasks are those associated with how the work tasks and processes are improved. This aspect of process improvement also indicates a culture of learning, one in which change, innovation, and adaptability to change help ensure sustainability (Malik & Garg, 2017). An analysis of an organization's behavioral capabilities then leads to an analysis of the existing structures in place, their ability to work effectively together, and the identification of methods already in place to ensure change and growth through process improvement.

The framework's **emotion-regulation** capability deals with the employees' emotional aspects and how the organization addresses their needs. This component is concerned with how optimistic employees are in their daily work, how satisfied they are with their jobs, their mental fortitude, and how they are allowed to speak their minds and have their ideas and emotions heard (Williams et al., 2017). All these aspects are critical components in how the employees make sense of and give meaning to their work (Weick et al., 2005). In terms of resilience, this also speaks to the relationships

amongst workers and their ability to respect and interact emotionally with their co-workers, especially in times of stress or uncertainty (Williams et al., 2017).

The last capability of the resilience framework aligned with resource endowments is the **relational** capability. At the core of this capability is the idea that there must be trust among all stakeholders involved for an organization to be resilient. This trust, in turn, leads to the ability of the other resource endowments to function correctly (Williams et al., 2017). For example, if there is no trust between individuals, the cognitive skills of another worker may not be leveraged since the information provided may not be trusted. The same applies to the capability to coordinate processes and the capability of having hope for the future of the organization. And this relational capability provides a context for the first three capabilities (cognitive, behavioral, and emotion-regulation) to be activated (Williams et al., 2017). Without this capability in place, the ability of employees to trust their leadership is absent. This lack of trust, in turn, leads to hesitation and questioning in following guidance and a delay in implementing changes. The ability of an organizational leader to foster openness, be cognizant of the diversity of the team makeup, and instill trust is crucial to navigating barriers to becoming more resilient (Crosweiler & Tschakert, 2020).

While the four capability endowments must be nurtured for an organization to become resilient, some processes must be in place for those capabilities to be drawn upon at the appropriate time. The second set of framework elements related to resilience speaks to an organization's ability to have processes to prepare for and then restore from crisis events (Williams et al., 2017). In addition to the capabilities discussed

above, organizations must also have the organizing and adjusting processes of **Preparing** and **Restoring**, highlighted in the red box in Figure 3.

The processes related to **preparing** within an organization speak to how the organization detects a potential upcoming crisis, how they train, and what steps are taken to enact contextually specific processes to address the potential risk (Williams et al., 2017). This area of the framework deals with an organization's ability to monitor its environment and respond appropriately. It is within these processes where the organization can draw upon the capabilities previously explained. Preventive measures include developing networks, designing and implementing the coordination techniques, and training the stakeholders within these processes. Metrics and indicators are evaluated, and procedures are put in place to proactively monitor these items to help alert the organization to a potential crisis event (Williams et al., 2017).

Restoring is concerned with the processes necessary when responding to a crisis event, the steps and processes that an organization executes to try and stay within an acceptable level of performance during the event (Williams et al., 2017). While some events may be typical in duration (such as weather-related events), the processes within this area must also cover non-typical responses and the ability of the organization to quickly pivot to new approaches, making use of quick decision making, improvisation, and bricolage that helps move from vulnerability to resilience (Weick, 1993). The organization's ability to remain creative during a crisis, drawing upon what is available in terms of resources and utilizing them to survive and thrive, is found within these restoring processes. It is within these processes where the organization can draw upon the capabilities previously identified. Resilience involves using those capabilities to

respond, improvise when necessary, and do what is required to avoid a catastrophe. Within these processes, there may be a reallocation of resources, increased communication, and sensemaking, all drawing upon the various capabilities (Williams et al., 2017).

The last essential concept from the resilience portion of the framework is the **resilience feedback loop**, highlighted in blue in Figure 3. During a crisis response, a resilient organization will gain new insights from the effort that can be used to update the resource endowments and processes related to preparing and restoring (Williams et al., 2017). Without this last key step, the entirety of the framework becomes static as no new information is taken in to adjust the processes. “Resilience can be facilitated by learning from experience with adversity”(Williams et al., 2017). The lessons learned through the resilience efforts of an organization must be fed back into the system to allow for changes. In this way, resilience becomes tied to the idea of process improvement. Linked with the concept of problem-solving and following a plan-do-study-act circular process, a resilient organization learns and improves its processes by studying the outcomes of initial responses (Johnson & McLean, 2021). The feedback loop occurs at any point in the process where lessons are learned, and improvements to the capabilities or processes can be implemented from these lessons. For example, if a process does not allow a key metric to be met, changes must be made to the process to meet the objective target. A critical question that should be asked as part of the feedback loop is, “What changes can we make that will result in improvement?” (Johnson & McLean, 2021).

The Williams et al. conceptual framework gives a model to guide this capstone research through a rigorous inquiry to evaluate the identified capabilities, processes, and feedback process within Missouri State University and their response to the COVID-19 pandemic. By collecting information within each of the three components of the framework, evaluating their existence, maturity, and effectiveness, this study will identify findings if it is determined that gaps or weaknesses exist within any of the components. The framework and literature on resilience will also help guide recommendations to help remediate identified findings.

Research Question

To understand Missouri State University's approach to crisis and because they seek to become a more resilient institution, this project focused on the following question: How does a university respond to a crisis? The university leadership and stakeholders felt that their inability to adequately and quickly respond to the dynamic situations that arose during the pandemic would leave them vulnerable to similar problems in the future. While the university had crisis management plans for various types of events, none covered events of the magnitude and scope of the pandemic response, nor did it envision an end-state that was not a return to routine operating procedures. If the university is to thrive during a similar event in the future, the stakeholders felt that changes must be made to the structures and processes to allow for a readied response and more inclusive decision-making.

With the literature stating that organizations should look to shift from traditional crisis management to a more resilient approach (Fiksel, 2015; Linnenluecke, 2017; Ortiz-de-Mandojana & Bansal, 2016; Ruiz-Martin et al., 2018), and with the conceptual framework identifying thematic areas of resilience, the capstone study was designed to gather data that would help examine how resilience is demonstrated and where the areas of growth exist.

Project Design

I met with the President of the University, Dr. Clif Smart, during the summer of 2020 to discuss the potential of partnering for a capstone research project geared towards assessing the school's response to the COVID-19 pandemic. Meetings were also held with Dr. Frank Einhellig and Dr. Keri Franklin, the Provost and Associate Provost, to discuss the potential partnership further. These three individuals were the stakeholders for this project and will be the recipients of the final presentation. The agreed-upon approach evaluated the school's pandemic response and made recommendations for how improvements could be implemented. I coordinated my interactions with the school through the Office of the Provost, which allowed me to work directly with the university's technology department for any questions I had regarding contacting university employees.

This study was designed to focus on the capabilities and processes of the conceptual framework, capturing information aligned with each area and evaluating the information gathered to form findings on the maturity and status of the university's level of resilience. A sequential, exploratory mixed methods approach was utilized to support the research combining a quantitative survey and qualitative interviews to seek information related to the research questions (McKim, 2017). Survey questions were created and coded to align with the framework and included one question that asked if the respondent would like to be interviewed as part of the study's qualitative portion. The design was also configured to allow the qualitative interview questions to align to

the conceptual framework while also soliciting additional information on topics that emerged during the analysis of the initial survey data.

The exploratory design was chosen and implemented in a sequential format, with the quantitative survey being sent first. The results from the survey helped drive the qualitative questions included in the interviews. This approach was chosen due to the availability of quantitative data available since the Office of the Provost at Missouri State was ensuring access to all university employees.

Participants

After The President of the University approved the study design, I worked with the Office of the Provost to obtain employee details for inclusion in the quantitative survey. The Provost provided me with a list that included all 1,981 employees of the university, broken down by the employee’s role. With the assistance of the school’s Information Technology organization, I sent the quantitative survey to all employees through the school’s email system.

Role	Total Sent
Staff	1176
Faculty	672
Administration	133
Total	1981

Figure 4 - Surveys Sent by Employee Role

Data Collection

Quantitative Survey

The initial data gathering for the capstone research was performed via a survey sent to all 1,981 Missouri State employees. Three separate surveys were sent out based on the employee's role to analyze respondent information for differences in responses. The questions on each of the three versions of the survey were identical except for the wording aligned to the respondent's role. The Office of the Provost had previously created customized email address lists determined by the individual's job code, thereby making it easy to identify members of the administration, faculty, and supporting staff of the school.

The survey questions were designed to help gather information about the school's pandemic response components and were aligned to the conceptual framework guiding the research. Each survey also included an open-ended question that allowed the recipient to share thoughts and insights on the process. These questions were included in the qualitative portion of the study and did not inform the quantitative results.

The data gathered during the quantitative survey portion of the research was collected and analyzed through the lens of the conceptual framework. Each question in the survey was aligned to one of the framework's capabilities: Cognitive, behavioral, emotional, preparing, restoring, and reinforcing through the feedback loop. Each capability will be examined separately to show the data collected and the similarities

and differences that emerged from the data analysis. Figure 5 shows a sample of the survey questions and how they were created in alignment with a capability within the conceptual framework.

Capability	Sample Survey Questions
Cognitive	Were you involved in crisis management planning or enactment of a crisis management plan?
	Experts were identified and utilized? (Fully, Covered with small gaps, Covered with large gaps, Not covered)
	Positive outcome of the effort - Identification of experts that were not previously known? (Yes/No)
Behavioral	Roles and Responsibilities were clear? (Fully, Covered with small gaps, Covered with large gaps, Not covered)
	Information was timely and shared appropriately? (Fully, Covered with small gaps, Covered with large gaps, Not covered)
	Unforeseen items were handled adequately by the response team (Fully, Covered with small gaps, Covered with large gaps, Not covered)
Emotion-Regulation / Relational	Emotional aspects were included and addressed (Fully, Covered with small gaps, Covered with large gaps, Not covered)
	Positive outcome of the effort - An enhanced sense of trust and teamwork among the employees? (Yes/No)
	Positive outcome of the effort - Ability to continue on core mission despite the event? (Yes/No)
Preparing	How well do you feel Missouri State was prepared for the pandemic event? (Fully, Well Prepared (small gaps), Prepared (large gaps), Ill Prepared)
	Was the university crisis response ever practiced or tested at a university-wide level prior to the pandemic? (Yes/No)
	There was adequate pre-work to prepare for the event (Fully, Covered with small gaps, Covered with large gaps, Not covered)
Restoring	The university was able to return to a close-to-normal status given the situation (Fully, Covered with small gaps, Covered with large gaps, Not covered)
	Positive outcome of the effort - Identification of ideas that could be incorporated back into the everyday operations (Yes/No)
	Positive outcome of the effort - Ability to continue on core mission despite the event (Yes/No)
Reinforcing (Feedback Loop)	Lessons learned were incorporated back into the processes? (Fully, Covered with small gaps, Covered with large gaps, Not covered)
	Positive outcome of the effort - Identification of areas for improvement? (Yes/No)

Figure 5 - Sample Survey Questions by Capability.

Cognitive

The **cognitive** capability refers to having the right people in the right roles with the correct information and is key to becoming resilient. An expert that is correctly placed within the organization and is familiar with the process allows for a quicker determination of potential disruptions. It also allows for that same expertise to more

quickly devise alternate plans and possible solutions to navigate the problem at hand (Williams et al., 2017).

Several questions on the survey were geared towards gathering information around the cognitive structure of the university's response to the pandemic. These questions sought to assess if the organization was thoughtful and looked broadly enough within their stakeholder groups for appropriate inclusivity when creating their response plan. These questions related to the cognitive capability included asking about the respondent's role in the crisis and whether experts were identified and utilized. By analyzing the responses to these questions, the effectiveness of the cognitive portion of the framework could be determined within Missouri State's response plan. Figure 5 shows example questions on the survey related to the different capabilities within the conceptual framework. These questions also show examples of the four-point Likert scale question type utilized in the quantitative survey. This approach allowed for the positive versus negative answer comparison that helped drive the analysis.

Behavioral

As a capability in the context of this framework, **behavior** speaks to an organization's operational abilities and processes: How the organization's employees act in given situations, how they share information, and how they work together. Members of the organization need to be aligned in their behavior during a crisis. As research suggests, "in organizations with fragmentary, myopic and disparate understandings of how the work is accomplished, there are likely to be more failures to

learn from operating experience, recurrent problems, and cyclical crises” (Carroll, 1998, p. 699). Several questions on the survey related to the behavior capability of the framework included ones about the timely dissemination of information, the communication from the leadership, and the execution of the plan and the school's core mission during the crisis event. The information gathered from these questions would analyze the organization’s operational effectiveness and behavior during the pandemic.

Emotional Regulation/Relational

The capabilities of **emotion regulation** and **relational** deal with the organization's mental fortitude and the social connections and trust between the stakeholders (Williams et al., 2017). These capabilities also connect to the organizational culture overall as they relate to emotion and care. Literature has shown that a positive effect during a crisis promotes personal resilience in employees and that organizational leadership is key to fostering positive results at times of crisis (Sommer et al., 2016). Literature also shows that employees with this emotion regulation in check and positively supported can produce more positive output (Avey et al., 2009). An organization can also work with their employees and understand and address their emotions to create an “ethic of care” (Lawrence & Maitlis, 2012). Literature also states that this cultural tact allows organizations to flourish more easily when the organization’s leader (in this case, administration) views their faculty and staff as more than just employees but as people with feelings and emotions (Lawrence & Maitlis, 2012).

The questions in this section of the survey (see Figure 5) were focused on obtaining the respondent’s information about the organizations and their emotional state

during the school's crisis event. The questions asked about the perceived sense of trust with others and leadership during the response and asked if emotional aspects of the employees were solicited and addressed.

Preparing

The processes associated with **preparing** from the conceptual framework deals with the idea of preventative risk management to preclude more significant crisis events from occurring. This area delves into how the organization strengthens its risk management across all boundaries, coordinates with each area, and plans and practices its efforts before an event occurs (Williams et al., 2017).

The questions created and coded to align with this theme ranged from asking if the respondent felt a formal plan was in place at the beginning of the pandemic to asking if a response plan had ever been practiced or tested. There were also questions about the structures that may have been put in place during the event and whether these structures and their roles were clearly defined and socialized with all stakeholders.

The data gathered from this section would be analyzed to determine if Missouri State had adequately prepared for their response and if they had rehearsed, in theory or practice, the structures and roles that should be utilized during a response. Figure 5 shows example survey questions related to the Preparing processes within the university.

Restoring

The processes of **restoring** within the conceptual framework are related to the organization's ability to return to a typical or more progressive state utilizing its resilient processes. The questions within this section were geared towards gaining information about how well the school could adapt during the pandemic. In this section, there were also questions about how well the respondent felt the school performed during this crisis or if they felt no plan was in place at the beginning of the event. The analysis of data collected in this section would help determine if the restoration process themes were adequately addressed and if the school could execute its stated goals and mission despite the pandemic.

Reinforcing (Reliance Feedback Loop)

The last thematic section of the survey was related to reinforcing and updating the school's practices and processes (through the **reliance feedback loop**) based on the lessons learned through the school's response. The questions in this section were directly aligned with determining if lessons were learned from the school's pandemic response and how or if those lessons were used to update the processes for future responses. There were also questions (see Figure 5) related to what types of lessons were learned. For example, were new experts identified during the process and assigned a new role for the future, or were there specific areas of improvement that were then fixed after the initial discovery. The data gathered in this section would address the feedback loop portion of the framework and give insights into the existence

and success of any processes that made continuous improvement a part of the school's response.

Leadership

Literature on resilience and the relationship with leadership shows that a resilient leader focuses and prepares his organization to recognize and resolve potential crisis events before they happen (Williams et al., 2017). Especially in situations that are abnormal or unique, skills such as sensemaking and sense-giving (Christianson et al., 2009), respectful interactions (Weick, 1993), and communication (Demiroz & Kapucu, 2012) must be demonstrated by leaders to help guide the organization through a crisis event.

With the literature showing a linkage between leadership and resilience, several questions on the survey were geared towards learning about the role of administration in Missouri State's response to the pandemic. These questions were provided to faculty and staff and were directed at evaluating the role of the school's leaders in areas such as communication, inclusion, and guidance. The same questions were posed to the school's administration for self-evaluation and comparison against the other two groups. Figure 6 shows sample questions from the survey designed to gain information about the leadership aspects of the administration.

Capability	Sample Survey Questions
Leadership	School values were reflected in the effort? (Fully, Covered with small gaps, Covered with large gaps, Not covered)
	An overall Response Vision was agreed to and incorporated into the crisis respons? (Fully, Covered with small gaps, Covered with large gaps, Not covered)
	With regards to the administration of the university, rate their level of readiness for the pandemic event? (Fully, Covered with small gaps, Covered with large gaps, Not covered)
	Do you feel there was adequate communication from the administration and crisis team to you during the event? (Yes/No)

Figure 6 - Sample Quantitative Survey Questions related to Leadership.

The surveys were housed in Qualtrics, and the invitation to participate to the recipients was sent out in November 2020. The survey was open for two weeks to collect responses, with the end coinciding with the beginning of the school’s Thanksgiving recess. No incentives were advertised or awarded for participation. In addition to the survey questions, an additional question asked the recipient if they would like to be contacted in the future for a follow-up qualitative interview. This additional question was added at the Provost Office’s request not to send follow-ups to everyone to solicit participation in the qualitative interviews. The quantitative survey questions were created to capture how Missouri State responded to the pandemic and was constructed to align with the capabilities and processes within the conceptual framework (See Appendix B, C, and D for complete questionnaires and results).

Qualitative Interviews

One question on the quantitative survey form asked the respondent if they would like to be contacted for a follow-up qualitative interview. Those respondents expressing interest would become a respondent pool from which to draw interviewees.

The data gathered during the qualitative interview portion of the research was collected and analyzed through the lens of the conceptual framework. Each question in the survey was aligned to at least one of the framework's capabilities: Cognitive, behavioral, emotional, preparing, restoring, and reinforcing through the feedback loop. The qualitative interview questions were created after an initial analysis of the quantitative survey responses. They were designed to gain additional insights on all areas, emphasizing those shown to have a more significant negative or disparate response rate amongst the three groups (administration, faculty, and staff).

Qualitative data was also collected as a part of the quantitative survey, with one question asking the respondent to describe what aspects of the school's response plan needed improvement. It was left as an open-ended question so that respondents would feel free to include topics of any nature that they deemed necessary.

The sample pool of interviewees was generated by following up with the survey respondent who had answered "yes" to the survey question: "Would you be willing to participate in a 15–30-minute follow-up interview related to your answers on this survey?".

As with the quantitative survey questions, the questions on the qualitative interview were aligned with the different areas of the conceptual framework (see Figure 7). The questions were also utilized to allow for more open-ended qualitative input from the interviewees. The information gained from the interviews would also be coded to analyze other themes that may present themselves.

Capability	Sample Survey Questions
Cognitive	Do you feel that the "best" people were identified and utilized as part of the school's response?
Behavioral	Do you feel that Missouri State took steps towards their desired end-state during the event? If so, were changes made? If not, what changes do you feel should have been made?
Preparing	Overall, do you feel that Missouri State is more prepared for a future event now? Why or why not?
Restoring	Are there any lessons learned from the response that you feel will help in a future event? If so, are they being integrated into the future processes, and if so, how?

Figure 7 - Qualitative Interview Questions by Capability.

A total of ten questions were constructed to help understand the individual interviewee’s interpretation of how Missouri State had responded to the pandemic event, emphasizing the conceptual framework areas that had emerged as potential areas of concern from the quantitative survey data. The questions were fashioned to allow the respondent to elaborate on their answers. After each answer, the interviewee was asked to say more about why they gave that particular response. This follow-up allowed for more information to be captured for coding and analysis after the interviews were complete.

Due to the limitations in the number of interviews conducted, I also sought to analyze Missouri State’s emergency response plan for the COVID-19 pandemic to gain additional information. However, at the event's outset, the school did not have a pandemic plan in place. The university’s crisis response was constructed during the event itself and placed on a central website available to all students and employees of the university. The information gathered from the university’s COVID-19 website will be analyzed in conjunction with the qualitative interview data and coded in the same fashion as the interview response data.

Data Analysis

The design of the survey and interview questions was coded to align with the elements within the conceptual framework. This design was created to analyze each capability and response process to verify their perceived effectiveness during Missouri State's pandemic response. The use of Qualtrics to administer the survey allowed for the data to be compared using the tools inherent within the Qualtrics application, and the segmentation of the data amongst the three groups would allow for comparison. A four-point Likert scale for some questions would also allow for a positive versus negative evaluation. The two higher ratings align with a positive view and the two lower ones with a more pessimistic view. The qualitative interview data collected were coded by analyzing the tone and terms used to help determine a positive or negative response. Ultimately, all the response data from the quantitative survey and qualitative interviews were studied against the conceptual framework capabilities and processes to drive findings and recommendations.

The data gathered through the quantitative and qualitative methods indicated which areas of the conceptual framework would benefit from greater attention and development.

Capability		Faculty/Staff Questions	Administration Questions
Resilience	Cognitive	F2, F3A, F4A, F5A, F6A, F7.3, F8.4	A2, A3, A5.3, A6.4
Resilience	Behavioral	F7.1, F7.4, F7.5, F7.7, F7.11, F8.9, F10	A5.4, A5.5, A5.7, A5.11, A6.9, A10
Resilience	Emotion-Regulation	F7.8, F8.5, F8.9	A5.8, A6.5, A6.9
Resilience	Relational	F7.9, F8.5, F10	A5.9, A6.5, A10
Resilience	Preparing	F1, F3, F3B, F4B, F5B, F6B, F7.6, F8.8, F9, F10, F10A, F10B, F12, F13	A1, A4, A5.6, A6.8, A7, A8, A9, A10, A12, A13
Resilience	Restoring	F7.13, F8.3, F8.7, F8.8, F8.9, F10, F10A, F10B, F10	A5.13, A6.3, A6.7, A6.8, A6.9, A8, A9, A10
Crisis	Cognitive	F2, F3A, F4A, F5A, F6A, F7.3, F8.4	A2, A3, A5.3, A6.4
Crisis	Behavioral	F7.1, F7.4, F7.5, F7.7, F7.11, F8.9	A5.1, A5.4, A5.5, A5.7, 5.11, A6.9
Crisis	Contextual Reinforcement	F7.12, F8.3, F8.7, F8.8	A5.12, A6.3, A6.7, A6.8

Figure 8 - Survey Coding Aligned to the Conceptual Framework Areas.

The quantitative survey questions were designed and coded in alignment with the conceptual framework in a way that allowed for information to be collected about each of the capabilities (see Figure 8). While the resilient approach has a broader set of capabilities, the similarity in specific capabilities between the crisis management and resilient strategies allowed the information collected on particular questions to yield information for both approaches. This method was intended to gauge the maturity of each capability and then determine the gaps that would be needed to move towards the more resilient approach.

Capability	Question
Restoring	1
Relational/Emotion	2
Cognitive	3
Cognitive	4
Preparing	5
Behavioral	6
Cognitive/Behavioral	7
Cognitive/Preparing	8
Preparing/Feedback	9
Preparing	10

Figure 9 - Qualitative Interview Question Coding.

The coding for the qualitative interviews followed the same premise as the quantitative survey, in that the questions were aligned to capabilities within the conceptual framework (see Figure 9). The answers given by the interviewees would be aligned with the same capabilities and would be grouped by the tone of the response (negative versus positive). This alignment method would make the final data analysis easier as the data should all fall within the same thematic areas.

The surveys were sent out on November 6, 2020, and the response period was left open until November 25, 2020, which was the last day of classes at Missouri State before the Thanksgiving holiday. When the survey period was closed, the overall response rate was over 13% (n=260) and was spread across the three groups as follows:

Role	Surveys Sent	Responses Received	Response Percentage
Staff	1176	155	13.18%
Faculty	672	83	12.35%
Administration	133	22	16.54%
Total	1981	260	13.12%

Figure 10 - Quantitative Survey Response Percentages.

Quantitative Survey Analysis

The three versions of the survey allowed the responses to be analyzed based on an aggregate view by the capability within the conceptual framework. But this methodology also allowed for comparison between the three different roles of

employees within the university. This differentiation was advantageous when the analysis was conducted.

The first question asked all participants: Was Missouri State University prepared for this event? In looking at the response from the administration and faculty, Figure 11 shows that while 18.2% (n=4) of the administration felt that the school was fully prepared, only 6.4% (n=5) of the faculty believed that the school was fully prepared.

Figure 12 shows that while no one within the administration felt that the school was ill-prepared for the event, 11.5% (n=9) of the faculty thought that the school was not ready for the event.



Figure 11 - Preparedness Survey Question (Administration versus Faculty – Fully Prepared).

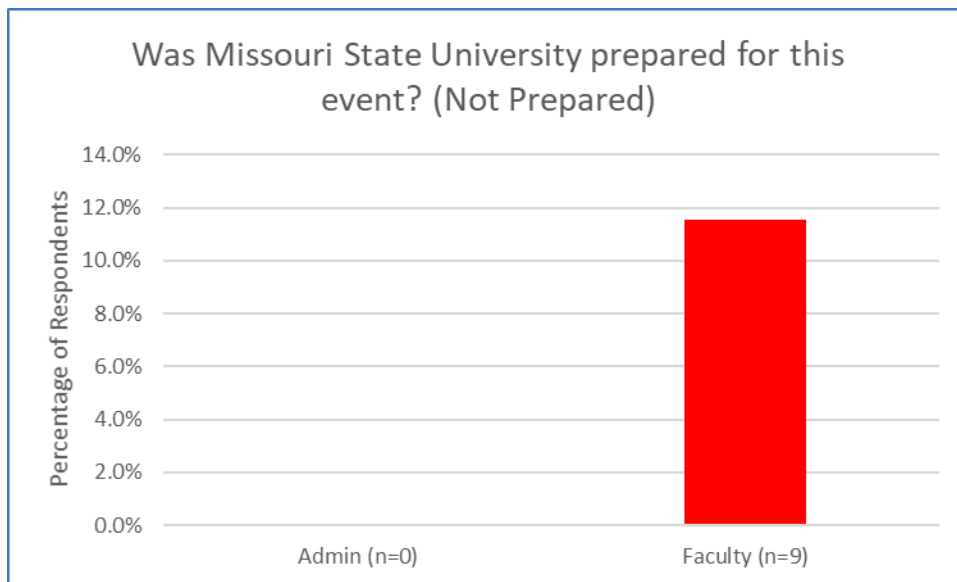


Figure 12 - Preparedness Survey Question (Administration versus Faculty – Not Prepared).

Analyzing the quantitative results by role and aggregate would allow for comparisons of the groups against each other. This method also allowed for the administration role to be segmented apart from the others, such that an analysis of the views on leadership could be conducted. This ability to focus on administration and leadership would be essential since the conceptual framework had noted the importance of leadership to demonstrate resilience during a crisis event (Williams et al., 2017).

Qualitative Survey Analysis

For the qualitative data, there were two sources of information. The first came from an open-ended question on the survey, and the rest from the one-on-one qualitative interviews. Thirty-three respondents included an answer to the open-ended question on

the survey, and 14 respondents of the survey volunteered to be interviewed for the research project.

Those that expressed interest in the interview (n=14) were sent a follow-up email with a link to a scheduling tool. The interviews were scheduled over the week of February 22-26, 2021, to avoid any conflict with the school's winter vacation schedule and mid-term exams. Out of the pool of 14, only three people were ultimately able to take part in the interviews. The interviewees included a representative from each of the three survey groups (administration, faculty, and staff), and the interview questions were the same for each participant. The interviews were limited to 30 minutes each and were recorded (with the interviewee's permission) using Zoom video conferencing software. This recording allowed the interview data to be transcribed and analyzed for coding after the interviews were completed. Lastly, the information gathered from the open-ended question was treated similarly and was interpreted for coding to be included in the final analysis.

Regarding the final data analysis, I had concerns about the limited qualitative data obtained from the three interviews. To help compensate, I reviewed the university's COVID pandemic website constructed during the crisis event. This additional review was done to gain more insights into the information disseminated, the quality, and the tone, timing, and themes. This information would then also be coded and utilized during the final analysis.

Findings

Four findings came out of this capstone research study. Finding 1 covers the foundational aspect of leadership that is key to becoming a resilient organization. The remaining three findings are more directly geared towards the conceptual framework themes of resilience.

Finding #1

Missouri State has a split in the working relationship between the administration and faculty that hinders communication, collaboration, and the potential for more easily enacting a cultural shift towards resilience.

The gaps in answers between the faculty, administration, and staff were evident throughout the collected quantitative and qualitative data. And while this research was geared towards the university's response to the COVID-19 pandemic, the faculty's more negative views compared to the administration (Figure 13) indicates a division in place that predates the pandemic.

Category	<i>Average Difference</i>
Cognitive	27.33%
Behavioral	22.00%
Emotional	23.50%
Preparation	12.67%
Restoring	15.50%
Reinforcing	30.00%

Figure 13 - Difference in Positive Responses Between Administration and Faculty.

Within each category related to the coding for resilience, the faculty responses were decidedly more negative (Figure 14). Areas that stood out were the higher difference in questions related to understanding the roles and responsibilities within the organization during the response, the sense of trust in others, and the feeling that lessons learned during the response were incorporated back into the process for improvement.

Category	Question	Positive Responses		Difference
		Admin	Faculty	
Cognitive				
	Experts were identified and utilized?	89%	61%	28%
	Response organization structure roles and responsibilities was clear?	88%	54%	34%
	Unforeseen items were handled adequately by the response team?	84%	64%	20%
Behavioral				
	Overall response vision was agreed to and incorporated into the crisis response?	84%	61%	23%
	School values were reflected in the effort?	94%	76%	18%
	Information was timely and was shared appropriately?	88%	63%	25%
Emotional				
	Emotional aspects were included and addressed?	66%	51%	15%
	There was a sense of trust on others embedded within the effort?	89%	57%	32%
Preparation				
	How well do you feel MSU overall was prepared?	68%	55%	13%
	There was adequate pre-work to prepare for the event	50%	47%	3%
	Do you feel that MSU had a formal plan in place when the event occurred?	67%	45%	22%
Restoring				
	The university was able to return to a close-to-normal status given the ongoing situation?	72%	56%	16%
	How well crisis plan was executed?	92%	77%	15%
Reinforcing				
	Lessons learned were incorporated back into the process?	89%	59%	30%

Figure 14 - Survey Questions with Admin and Faculty Positive Percentages.

Another critical aspect of this finding relates to the lack of trust between faculty and the administration. Trust is key to crisis communication, as well as the ability for stakeholders to carry out their roles during the crisis (Cadwell, 2019). The data gathered through the open-ended question on the survey mirrored the data. One respondent stated that “I have personally lost most trust in our administration after this event” and “There was no trust in the integrity of employees.” And as trust is also a fundamental tenet of sensemaking (Stephenson Jr., 2005), this further negated the ability of leadership to help give sense and guidance to the faculty on what should be accomplished during the crisis.

The finding of this division between the administration and faculty has a downstream effect, as another thematic area within leadership relates to sensemaking, sense-giving, and structuring the roles for people within the process. With communication being a significant gap in the response, the idea of leadership making sense of the problem without taking input from everyone and then giving sense back out suffered. Interviewee 2 stated that “Faculty couldn’t get their opinions included.... requests were declined.” Interviewee 1 was more blunt about the lack of the ability to have input saying that the school leaders should focus on “breaking down barriers with people below the administration because it definitely feels like there’s a disconnect.... you feel like you’re shouting into the void. You tell your director or your Assistant Vice President, and then it feels like it just disappears after that.”

The responses of the open-ended question mirrored the interviewee responses and included:

- “Faculty were not given the opportunity of giving input.”
- “Faculty would offer suggestions, but they went into a giant black hole.”

- “Expectations of faculty and staff were not formalized.”
- “There were unrealistically high expectations placed on us in terms of what we were to do, no checking in to see if those expectations were manageable.”

Literature notes that cohesion between groups is a key contributing factor to the success of resilience (Jewett et al., 2021). For Missouri State to become resilient, the gap between the faculty and administration must be addressed as a foundational step.

Finding #2

Missouri State’s key stakeholders did not consistently feel that the university was well-prepared for a crisis event.

While studies have shown that 96% of higher education institutions have an official emergency and disaster plan (Cheung et al., 2014), the data captured in this research showed that Missouri State, across all groups, did not know about an established response plan for the university. The data (Figure 15) also showed that a response, formal or not, had not been tested by most respondents.

Question			Yes	No
Do you feel that MSU had a formal plan in place when the pandemic event occurred	Admin	(n=22)	67%	33%
	Faculty	(n=83)	45%	55%
	Staff	(n=155)	42%	58%
Was the university crisis response plan ever practiced or tested?	Admin	(n=22)	28%	72%
	Faculty	(n=83)	3%	97%
	Staff	(n=155)	14%	86%

Figure 15 - Knowledge and Testing of Response Plan.

One of the key tenets of resiliency is an organization's ability to learn from its experiences and blend the lessons learned into a systematic process to improve its operations. There is a specific need to ensure that all stakeholders know of the plan and the procedures. The fact that only 45% of the faculty and only 67% of the administration knew that a plan existed speaks to the need for more socialization and training on the plan itself. As resilience is simply not a stand-alone process that exists in the ability of an organization to plan and then recover from an event, the steps of planning, socialization, training, execution, and ongoing learning that come with the resilience processes must be known and inclusive for the practice to become successful (Rice & Jahn, 2020).

An interesting survey question that had a consistent answer across all the groups was the one that asked if good pre-work was done for the event. Not one of the three groups was over 50% in positively answering this question, with the lowest being 46% and the highest at 50%. Those answers match the question (Figure 16) that asked about the perceived readiness of non-student groups, where the highest positive score came from the faculty at only 56% (n=37).

With regards to the other non-student groups, rate their level of readiness					
		Fully Prepared	Mostly Prepared (with small gaps)	Poorly Prepared (with large gaps)	Not Prepared
Administration	(n=22)	0%	50%	23%	28%
Faculty	(n=82)	14%	42%	23%	21%
Staff	(n=151)	2%	40%	43%	15%

Figure 16 – Survey Question about Non-Student Readiness.

But one group that everyone agreed was unprepared were the students themselves. The question (Figure 17) showed that the administration was the most positive, at only 33% (n=6). The faculty that were more closely in touch with the students only felt positive that students were prepared at a rate of 22% (n=14).

With regards to the students, rate their level of readiness					
		Fully Prepared	Mostly Prepared (with small gaps)	Poorly Prepared (with large gaps)	Not Prepared
Administration	(n=22)	0%	33%	33%	33%
Faculty	(n=82)	2%	20%	38%	41%
Staff	(n=151)	1%	19%	34%	47%

Figure 17- Survey Question about Student Readiness.

Within the interviews, the topic of a lack of preparedness came up as well. Interviewee 2 stated that “if there was a plan, it wasn’t well known” and that “decisions were made on the fly.”

In addition to the survey and interview responses, I examined the school’s emergency action plan documentation (Appendix A – Figure 24). In reviewing the information, I first noticed that there was no specific plan geared towards a pandemic event. When looking at the other guidance, I found that it lacked depth and appropriate direction. For example, the plan associated with severe weather was limited to the fundamental notions of taking cover and waiting for the event to end. By limiting the information for each event, the key stakeholders would have suffered to clarify guidance on the additional aspects of the event. In the case of the severe weather event, there was guidance around a “Missouri State alert” being issued. But nowhere in the documentation was there any guidance on how this alert would be received or how you

should register to receive these alerts. In times of crisis, the need for communication is key, but it is also essential to understand the needs and preferences of the stakeholders (Sellnow & Sellnow, 2010). The existing emergency action plans do not seem to have fully considered the need for information from stakeholders during a crisis event.

In summary, resilience does not imply that crisis events will not continue to happen. But the importance of being prepared and well-informed helps ensure that the organization can become more resilient and withstand these events. Literature talks about how resilience means being more prepared and ready for the next crisis instead of having confidence that the worst has passed in the current one (Carlson, 2018). Missouri State must look to embrace this culture of vigilant readiness to ensure they can move to become more resilient.

Finding #3

Missouri State does not have a response plan that is adequately inclusive of a wide range of stakeholders.

Critical to creating a proper response plan is the inclusion of stakeholders from all aspects of the organization (both internal and external) that will be a part of the crisis response (Heller & Darling, 2012). Yet, the data gathered through the qualitative means included comments like “Faculty were not given the opportunity of giving input” and “[Administration was] not interested in being comprehensive,” thereby speaking to the lack of inclusion of stakeholders when the response plans were being developed. Inclusion does not only pertain to the breadth of stakeholder experience but the depth of essential knowledge. This concern was revealed in the quantitative survey responses

related to inclusion under the cognitive theme. Figure 18 shows how 39% of the faculty did not feel that the university identified and utilized experts during the pandemic response.

Experts were identified and utilized during the pandemic response?							
		Fully Prepared	Mostly Prepared (small gaps)	Poorly Prepared (large gaps)	Not Prepared	Positive	Negative
Administration	(n=22)	39%	50%	11%	0%	89%	11%
Faculty	(n=82)	32%	29%	21%	18%	61%	39%
Staff	(n=151)	50%	35%	12%	4%	85%	16%

Figure 18 - Expert Input to Response Plan Question.

The results in Figure 18 show that the staff had a more positive view than even administration on this question. As the staff was less involved and farther removed from the actual crisis response activities, they may have answered this question assuming that the administration had taken steps to ensure that the proper experts would be involved in the response.

But more telling was the question (Figure 19) that asked if the respondent had been involved in the planning or enacting the school's crisis management plan. 38% of the responding faculty and 19% of the responding staff employees were involved.

Were you involved in crisis management planning or enactment of a crisis management plan?			
		Yes	No
Administration	(n=22)	55%	45%
Faculty	(n=82)	38%	62%
Staff	(n=151)	19%	81%

Figure 19 - Inclusion in Response Plan Creation Question.

Stakeholders, especially subject matter experts in an area, are necessary components of resilience plan creation to help ensure that inefficiencies, omissions, or errors are not created within the plan (Andrés & Poler, n.d.; Shamsuzzoha et al., 2010). The lack of inclusivity was highlighted during one of the qualitative interviews when an employee, whose role requires them to assist with disabled students said,

“My office actually wasn’t involved in any conversations regarding a mass policy or how students with a disability would be impacted. None of those conversations happened with our upper administration, and not for lack of want to...we were just never given a seat at the table.”

While the school continued functioning during the pandemic, respondents' ability to do so was attributed to the university employees' resourcefulness instead of a documented plan or guidance from above. The interviewees' responses include feeling that the plan “needed more insight on how each type of class is conducted” and that leadership was “not interested in being comprehensive.” Interviewee 2 stated that they did not “know if the best people were involved based on [their] knowledge.”

On a positive note, several qualitative responses mentioned the importance of the Faculty Center for Teaching and Learning (FCTL) in helping faculty with requests. During the interviews, two separate people singled the FCTL out by saying, “[The pandemic] definitely pushed people to our faculty center for teaching and learning” and “The FCTL stepped up outreach.” But with the university not having an inclusive approach when creating their response plan, employees were forced to look to others for guidance in what to do and how to respond.

This finding also aligns with literature about resilience when an organization does not include the proper inputs and ultimately does not address all the stakeholder needs (Mamouni Limnios et al., 2014). Figure 20 describes four organizational archetypes and where they sit within a resilience framework based on the levels of desirability and resilience.

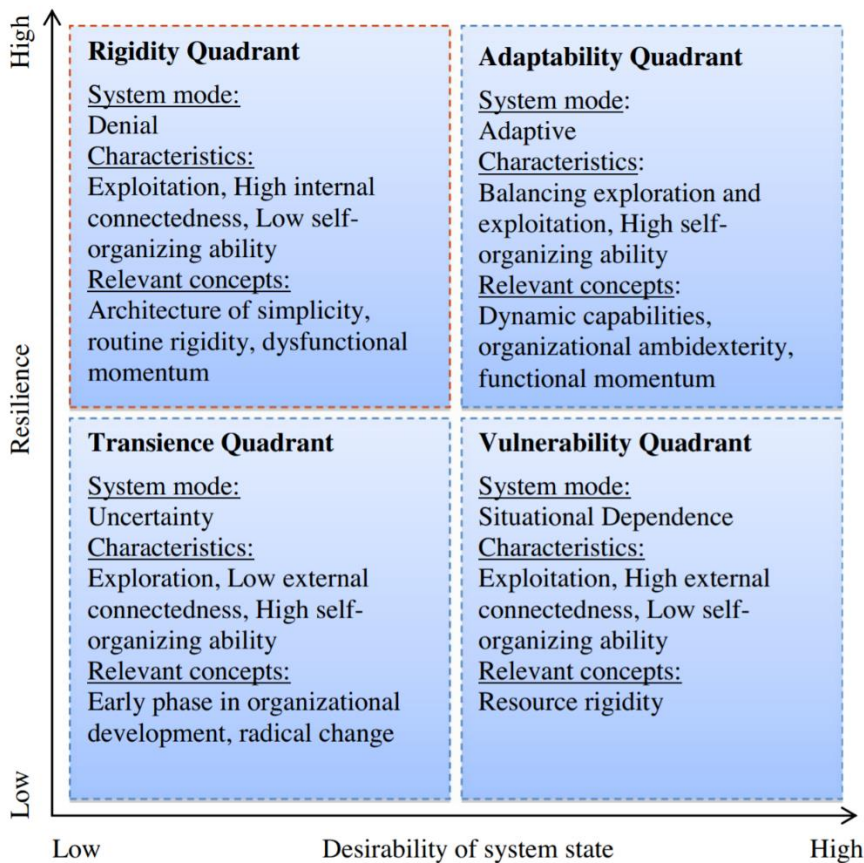


Figure 20 - Resilience Architecture Framework (Limnios et al., 2014).

Organizations that land in the Rigidity Quadrant (upper left on Figure 20) do not serve a significant portion of their stakeholders in their response. These organizations also tend to create plans that do not readily embrace change but maintain a status quo or rigid approach to their response. This reluctance to change happens because of the

lack of collaboration and change culture needed to move to a more desirable state in the framework (Mamouni Limnios et al., 2014).

Finding #4

Missouri State does not currently have metrics and measurements in place designed to indicate risk or measure success.

The data (Figure 21) obtained showed that 72% of the administration felt the university could return to a close-to-normal status, while only 56% of faculty felt the same way. Yet, any respondent could point to no indicators, values, or data that led to those conclusions.

The university was able to return to a close-to-normal status given the ongoing pandemic situation?							
		Fully Prepared	Mostly Prepared (small gaps)	Poorly Prepared (large gaps)	Not Prepared	Positive	Negative
Administration	(n=22)	28%	44%	22%	6%	72%	28%
Faculty	(n=82)	26%	30%	35%	9%	56%	44%
Staff	(n=151)	32%	49%	17%	3%	81%	20%

Figure 21 - Return to Normal Status Survey Question.

The metrics associated with a resilient organization can be broken down into Key Risk Indicators (KRIs) and Key Performance Indicators (KPIs). Key Risk Indicators are metrics and values selected for their ability to forewarn an organization of an upcoming problem by looking at trends in loss or problems (Davies et al., 2005). Whereas Key Performance Indicators are metrics and values typically aligned with organizational

goals, tracking their path to success or the need for change when goals are not being met (Zhu et al., 2017).

Missouri State utilizes KPIs to track typical collegiate metrics such as total enrollment, diversity statistics, expenditures, and grant activity. But these metrics are reported on an annualized basis, making them inadequate for a more immediate response in terms of pivoting an approach for resilience. No KRIs were noted during the data gathering process and were not mentioned by the respondents.

There were comments gathered during the interviews that alluded to the need for metrics to help align the goals of the crisis response efforts. Interviewee 1 had several observations about how the university viewed the results of their actions and how it was not readily apparent to all involved. Their comments included:

“The university treated it as there was an end in sight.”

“[Administration’s] was once we take care of this, everything would be ok.”

“And so I think that’s a bar of, we were doing the best that we can and then now this move to how quickly can we get back to normalcy.”

“And they had been wanting to get as quickly to the finish line as possible and basically as just you know kind of putting band-aids on things as much as we can.”

Each of these comments demonstrates a need to monitor and determine when the goals are achieved. Without clear metrics and a definition of what normalcy looks like in terms of those metrics, there would be no way for the university to know when its goals have been realized.

Recommendations

The following recommendations for Missouri State University are intended to develop a more resilient approach to managing crisis events in the future.

Recommendation #1

Missouri State should create an inclusive group to determine an ongoing, resilient approach for crisis event response.

With a division between faculty and administration, a lack of a clearly understood approach, and the need for a more inclusive process to respond to crisis events, this recommendation will help address three of the findings. The dramatic difference between faculty and the administration found in the respondent data from both the quantitative and qualitative interviews is an issue that must be addressed to move the university forward in terms of its resilience and ability to react to future events cohesively. To do so, the Missouri State administration should coordinate with the Faculty Senate and the Faculty Teaching and Learning Center to ensure that appropriate and comprehensive representation is prioritized. The lessons learned from the pandemic response on underrepresented or dramatically impacted groups should inform an adequate representation during the crisis-response planning and development process. In addition, the administration should work with other faculty, staff, and student groups to ensure representation from those groups. With the data showing that no respondents felt that students were prepared for the pandemic response, there should also be an emphasis on obtaining student representation that

best aligns with the student demographics. For example, the latest Common Data Set (2020-2021) for Missouri State University shows that 80% of undergraduate students do not live on campus (Missouri State University, 2021a). The representation of students in the group should be considered and ensure inclusivity just as it should be for faculty and staff.

Lastly, once the plan is created and socialized, the group should reinforce the effort with training and create a process to reintegrate lessons learned and new ideas into the plan to help ensure it remains viable and current. This last portion is directly aligned to the feedback loop of the conceptual framework and is key to becoming a resilient organization. Without it, the response plan becomes only a point-in-time effort that becomes stagnant. Literature on resilience training talks about the central importance of training and familiarizing employees with the context and challenges of crisis response, stating that “it is through training that people are able to respond effectively by working in teams” (Koronis & Ponis, 2018, p.36).

Recommendation #2

Missouri State should create an inventory of Key Risk Indicators and Key Performance Indicators for their resilience efforts.

Creating Key Performance Indicators (KPIs), monitoring them, and implementing change when indicators show success or the potential for failure are critical to a resilient organization. Whereas the school has already implemented Key Performance Indicators at a high level, matched against the university-wide goals for success and reported regularly, KPIs should be expanded for use during crisis response times. The goals and direction of the university changed during the pandemic, moving from long-range planning and goals to more immediate ones to help ensure that the school continued to provide services in the short term. Following that direction, KPIs should be created to align with these short-term goals and monitored during times of stress and crisis for the school. By doing this, the school can address knowing when they have met their short-term goals and can pivot resources elsewhere if needed.

The school should identify and create Key Risk Indicators (KRIs) to alert the administration when risk manifests or has more potential to manifest itself. An initial effort should also be included to set a baseline of data that can be used for comparison to help derive when the risk potential is rising. These KRIs should be continually monitored against the baseline measurements as part of the school's operating resilience. It should become one of the bell weathers for when a response may become necessary.

Literature shows that creating benchmarks using metrics allows an organization to observe changes that may require a resilient approach. Similar metrics can also alert the organization when they have “bounced back” to a place of normalcy (Hillmann, 2021; Pescaroli et al., 2020). As the data collected showed, there is a need for the better identification and monitoring of benchmark data for the university to understand when to initiate resilient processes. Lastly, utilizing metrics and creating goals will allow the university to reach the “end in sight” of a crisis event mentioned by Interviewee 1.

Recommendation #3

Missouri State should perform regular tests of their crisis response plans to evaluate effectiveness and readiness.

As was seen in the data collected, while some employees felt that Missouri State had a response plan at the beginning of the pandemic, 3% of faculty and only 28% of administration believed that a response had ever been tested. To help correct that finding, and after the response plan has been created through Recommendation 1, the university should regularly test the plan to ensure its completeness and viability in times of crisis. This testing can be accomplished through several different methodologies and exercises to help mitigate the effort needed.

For each type of response that may be needed, short-term and long-term, the use of tabletop exercises can help ensure that all parties are educated and included in their roles. By following suggested scenarios and walking through the resilience process with all the stakeholders, potential gaps can be identified and fed back into the resilience feedback loop to update procedures and the response plan. These events are

typically ½ day or full workday events and can be spread out over time to mitigate interference in daily activities.

Missouri State should also consider staging disaster recovery testing across all aspects of the university. These events typically replicate a disaster associated with damage to the central campus facilities and focus on the resilience of technology and staff's ability to work from other locations. With the lessons learned from the pandemic and the introduction of more remote classwork, this type of testing could show the school's ability to pivot to remote learning quickly.

Included in these test scenarios should be the reliance on communication, both out to the affected stakeholders and back into the resilience process from the same impacted individuals. A well-constructed and publicized plan is of no value if there is no communication that it needs to be enacted. The creation of different communication methods (phone, email, social media) should be utilized to ensure the most saturation. The information should be consistent and flow from a central source within the resilience effort.

As the survey data showed, only 11% of the administration felt that there had been enough pre-work before the pandemic response. Interviewee 2 also mentioned that any plan was not well known before the event. Literature shows that the testing of the plan can address multiple areas of resilience as well:

- Testing proves if the plan works and whether it meets requirements,
- Testing identifies weak links in the plan, allowing them to be corrected before the plan is needed, and
- Testing the plan can also act as a primary training tool for employees (Smith, 2001).

Discussion and Conclusion

This capstone research project was enacted to answer the problem of practice: How does a university respond to a crisis event? Literature related to resilience and crisis management and tangential literature related to higher education and leadership were reviewed. A conceptual framework was chosen to help guide the research, and data was gathered using a mixed-methods approach to drive the analysis. The findings derived through analysis of the data showed that Missouri State, serving as the focal site for the research, was not resilient as per the framework and definitions. In addition, findings revealed underlying themes of division that may preclude Missouri State from adopting a resilient approach more efficiently going forward.

The recommendations provided to Missouri State are meant to help address the findings discovered and lead the university to become more resilient in the future. These same findings may be present in other institutions, and the methods used here to collect data, evaluate, and make recommendations may be applicable.

Limitations

The limitations of this study were specific to the study's research design and timing of the research. First, while the amount of material gained through the quantitative surveys was sufficient for analysis, a lack of qualitative interviewees limited the value of the qualitative data provided. Only 14 people volunteered to be interviewed, and only three of those 14 signed up and took part in the process. While there was representation from each participant group, this leads to a biased presentation of views

that cannot represent the larger group. These interviews took place nearly one year (February 2021 versus March 2020) after implementing the school's response plan. This timing could lead to forgotten information that may have been key to the questions raised around the themes of resilience.

Another limitation was that only one open-ended question on the quantitative survey asking what could have been done better during the response. The wording of this question, and no inclusion of a second question framed in the positive, led the answers to be typically negative in their tone and content. This wording may have affected the respondent's ability to be more impartial on other questions, and the question gave the appearance of focusing on finding potential solutions instead of gathering unbiased data. Regarding the survey, it should also be mentioned that no compensation or incentives were given for completing the survey. This lack of incentives may have also limited the number of participants.

Conclusion

The goal of this capstone research study was to determine how a university responds to a crisis event. The findings presented here show that Missouri State while addressing the crisis of the COVID-19 pandemic, did so in a way that did not align with resilient practices found in the conceptual framework. While the school offered classes and proceeded with the Spring 2020 and Fall 2020 semesters, the approaches used were more reactionary in response than a more proactive, resilient approach. The recommendations presented here should help Missouri State pursue a more resilient response planning process, but additional steps and procedures will be needed. A resilient organization needs a solid foundation of leadership, collaboration, and a culture

that embraces organizational agility to succeed. The findings, and the subsequent recommendations, while particular to Missouri State University, may be helpful to other similar institutions as well in helping them move towards a resilient structure and approach.

The challenges to becoming a resilient organization are worth the cost, as the aspects of resiliency lend themselves to areas beyond just a single crisis event. The ideas and values ascribed to a resilient organization in the conceptual framework speak to benefits for an organization typically associated with job satisfaction and productivity. The concepts of trust between employees, strong leadership that can give sense to all aspects of work, and even training were mentioned in this study as a part of a resilient organization. And all those concepts are also aligned with and noted in the literature about job satisfaction and happy employees (Magnier-Watanabe et al., 2019). The length of the pandemic event and the associated mental stress and fatigue on employees must be considered. The concepts of resilience, if implemented, monitored, and executed correctly, will not only help ensure the survival and success of the organization. It can also make the organization a great place to work.

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Appendix A

The references in this appendix were obtained from Missouri State and are associated with the school's structure, emergency action plans in place at the start of the pandemic, and the related communication from the school leadership during the early days of the pandemic.

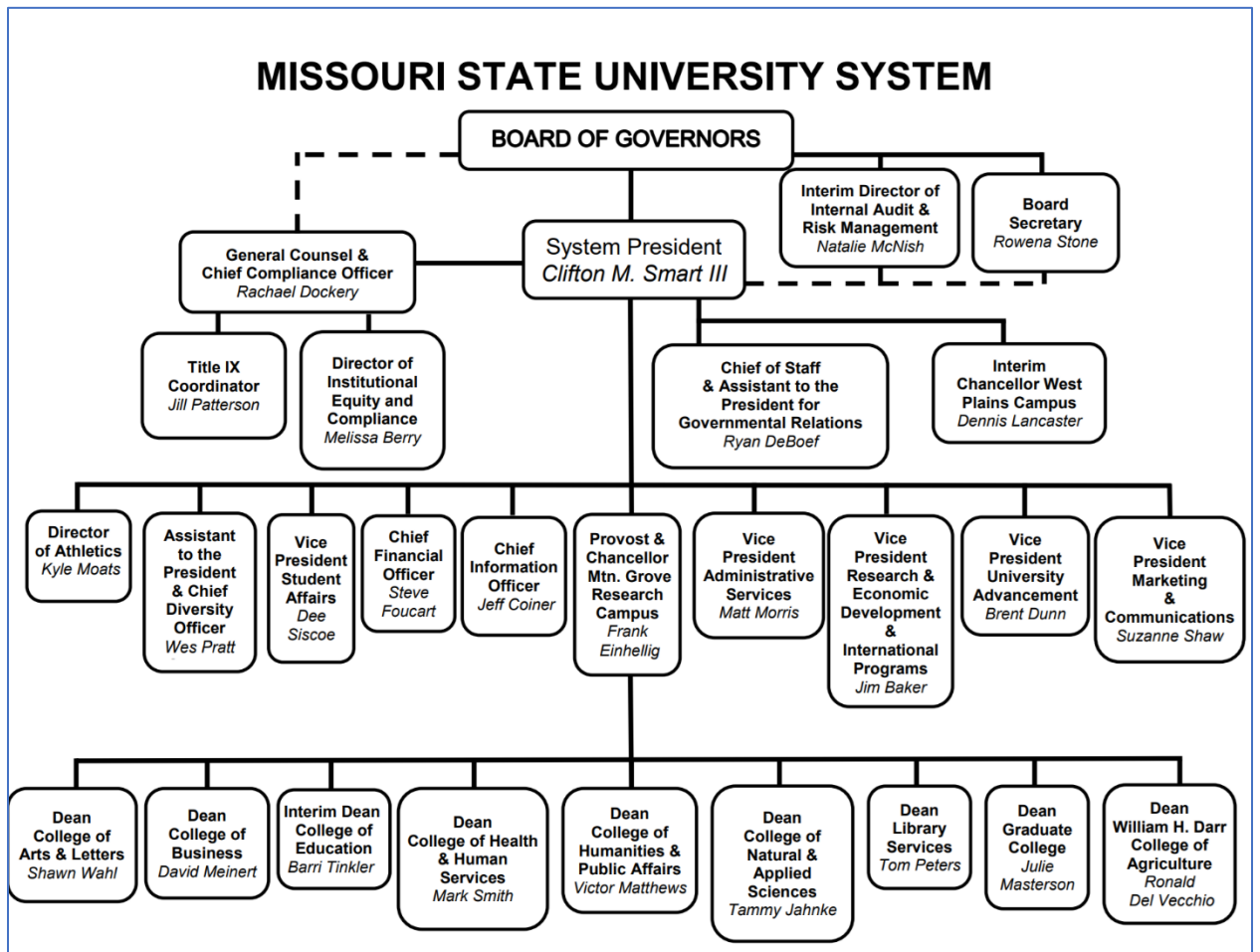


Figure 22 - Missouri State University Governance.

System overview

Missouri State University is a public university system with students who come from all over Missouri, the nation and the world.

We are a close-knit community of passionate and steadfast learners committed to ethical leadership, cultural competence and community engagement. Those are the pillars of the university's unique public affairs mission, granted to us by the Missouri General Assembly.

The system has four physical campuses — three in Missouri and one in Dalian, China — and an outreach program for any time, any place learning.



Springfield

The main campus in Springfield



West Plains

Offering two-year associate's degrees



Mountain Grove

Focusing on fruit science and agriculture research



Outreach

Take classes any time, anywhere



Dalian, China

In partnership with Liaoning Normal University

STUDENTS IN THE SYSTEM

26,001

ALUMNI

122,000+

EMPLOYEES

3,787

Figure23 -Missouri State University Facts.

Emergency Action Plans



Emergency Quick Reference Guide

Access the quick reference guide for evacuation plans.

EMERGENCY ACTION PLANS

Bomb Threats
Civil Unrest
Earthquake and Building Collapse
Fire
Hazardous Materials and Waste
Hostile Intruder
Severe Weather and Tornado
Sexual Assault
Threats and Stalking
Utility Failure

SHELTER LOCATIONS

All University Building Evacuation and Shelter Locations Reference Chart
Juanita K. Hammons Hall for the Performing Arts
Plaster Stadium
Hammons Student Center

EVACUATION INFORMATION

Evacuation Concerns for People with Physical Impairments
Building Evacuation and Shelter Locations Reference Chart

EMERGENCY RESOURCES

AED Unit Locations
Building Coordinators
Emergency Quick Reference Guide

ACCIDENT REPORTING FORM

Accident Investigation Report Form

Figure 24 - Missouri State University Emergency Action Plans.

Severe Weather and Tornadoes

Procedures during a tornado watch

If the National Weather Service issues a tornado watch, building coordinators will be notified via their weather alert radio systems.

Building coordinators will advise their departments, staff and faculty of the watch and when it expires. During the watch, employees should be vigilant and be prepared to take action should a warning be issued.

Procedures during a tornado warning

If National Weather Service issues a tornado warning covering the campus, a Missouri State Alert will be issued and the campus outdoor warning sirens will be activated.

If you are in a building, go to the identified shelter for your building. Move quickly and cooperate with those in charge. If you are unsure of the location of the shelter area, move to an interior room of the lowest level. If you are in a residence hall, follow their severe weather guidelines.

If you are outside, immediately go into the nearest building and to its shelter area.

If you cannot reach shelter, lie flat in a ditch or depression. Avoid areas subject to flooding.

Stay in the shelter until the warning is over. You will get a Missouri State Alert when the warning expires.

Procedures for faculty

- Direct occupants to move quick and orderly to the nearest shelter area in the building.
- Instruct occupants not to leave the building.
- Turn off all lights and electronic equipment in the room.
- Provide help to those with disabilities.
- Go with occupants to the nearest designated shelter area in the building.
- Remain in the shelter area until notified the warning has expired.

Figure 25 - Missouri State University Weather Emergency Procedures.

Missouri State Alert to Campus Community (March 12, 5 p.m.)

The following Missouri State Alert was sent to the campus community at 5:55 p.m. March 12, 2020.

Subject: Springfield classes cancelled for Friday, March 13

Class is cancelled for March 13, 2020

A presumptive positive case of COVID-19 has been identified in Greene County. We have been informed that the person is not a member of the campus community.

As a result, the university is cancelling classes for Friday, March 13.

Spring break is beginning immediately. We will continue to work on a plan to temporarily transition away from face-to-face classes following spring break. Details will be announced next week. Staff should continue to report to work as usual. Greenwood Lab School will also be closed on Friday, March 13. The Child Development Center will remain open.

Figure 26 - Missouri State University Class Cancellation.

Missouri State Alert to Campus Community (March 17)

The following Missouri State Alert message was sent to the Missouri State community on March 17, 2020.

Subject: Spring break extended one week; all in-person classes move to alternative delivery on March 30

Spring break extended one week; all in-person classes move to alternative delivery on March 30

Beginning March 30, in-person classes will be provided through alternative means.

Spring break will be extended through March 27 for students to allow additional time for faculty to prepare alternate methods of course delivery.

You will be contacted by your faculty members prior to March 30 with details for each of your scheduled courses.

Figure 27 - Missouri State Spring Break Extension.

Important Information for Students (March 27)

The following message was sent to Missouri State students on March 27.

Posted 2 p.m. March 27

Subject: Important information from Missouri State University

As most of you probably know by now, a [stay-at-home order](#) went into effect for Springfield and surrounding areas on Thursday, March 26. This has caused the university to make major changes to operations.

This is a very long email, but please read all of it. There is a great deal of important information included.

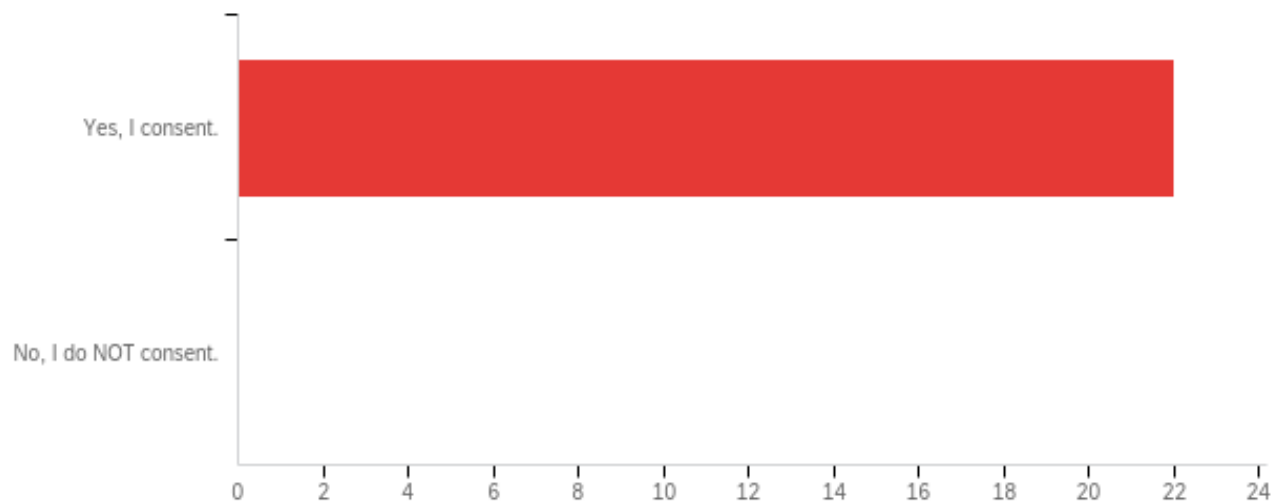
Figure 28 - Missouri State Closure Notice.

Administration Survey Results

Default Report

Missouri State Crisis Management / Administration

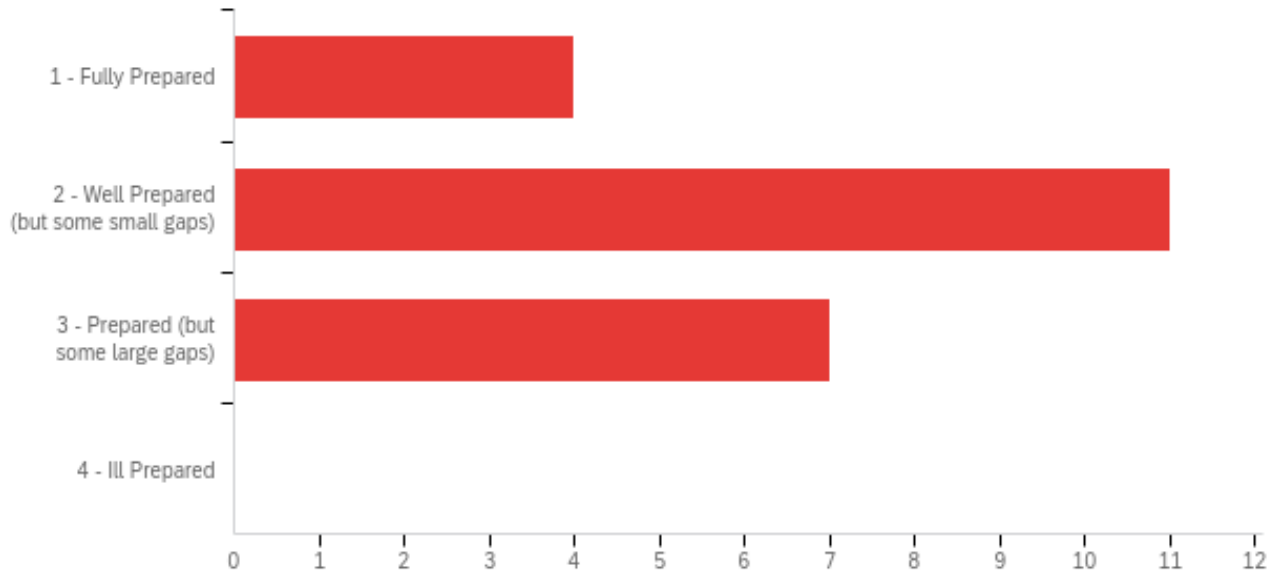
Q1 - These questions will help garner information related to Missouri State University's planning and response to the COVID-19 Pandemic event. This information is being collected as part of a Capstone Project for doctoral candidate, David Capps, who is seeking an Ed.D from Vanderbilt University. David obtained his B.S. and M.S. degrees in Computer Information Systems from Missouri State, and cares very deeply about his alma mater. He is hoping to utilize the information from this research, along with his expertise in disaster recovery and risk management to create recommendations that will help mature Missouri State's resilience practices. David lives in New York and is currently a leader in Risk Management for the Federal Reserve Bank of New York. He also has experience working in higher education at Fordham University, and will look to draw upon his past experience in crafting appropriate and sustainable solutions. The information that is being collected will be kept confidential. Please check the box below if you consent to proceeding with this survey.



#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	These questions will help garner information related to Missouri State University's planning and response to the COVID-19 Pandemic event. This information is being collected as part of a Capstone Project for doctoral candidate, David Capps, who is seeking an Ed.D from Vanderbilt University. David obtained his B.S. and M.S. degrees in Computer Information Systems from Missouri State, and cares very deeply about his alma mater. He is is hoping to utilize the information from this research, along with his expertise in disaster recovery and risk management to create recommendations that will help mature Missouri State's resilience practices. David lives in New York and is currently a leader in Risk Management for the Federal Reserve Bank of New York. He also has experience working in higher education at Fordham University, and will look to draw upon his past experience in crafting appropriate and sustainable solutions. The information that is being collected will be kept confidential. Please check the box below if you consent to proceeding with this survey.	1.00	1.00	1.00	0.00	0.00	22

#	Answer	%	Count
1	Yes, I consent.	100.00%	22
2	No, I do NOT consent.	0.00%	0
	Total	100%	22

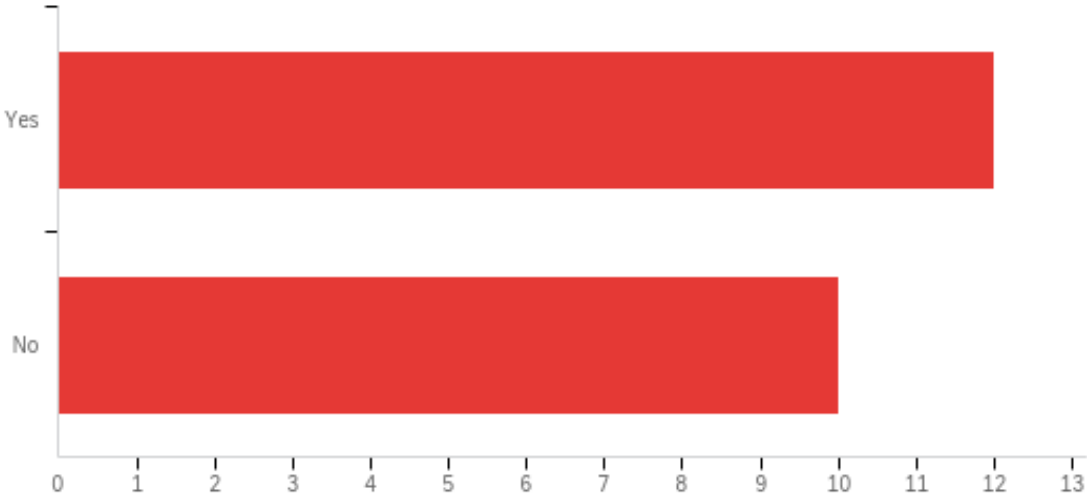
A1 - How well do you feel Missouri State overall was prepared for the Pandemic event?



#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	How well do you feel Missouri State overall was prepared for the Pandemic event?	1.00	3.00	2.14	0.69	0.48	22

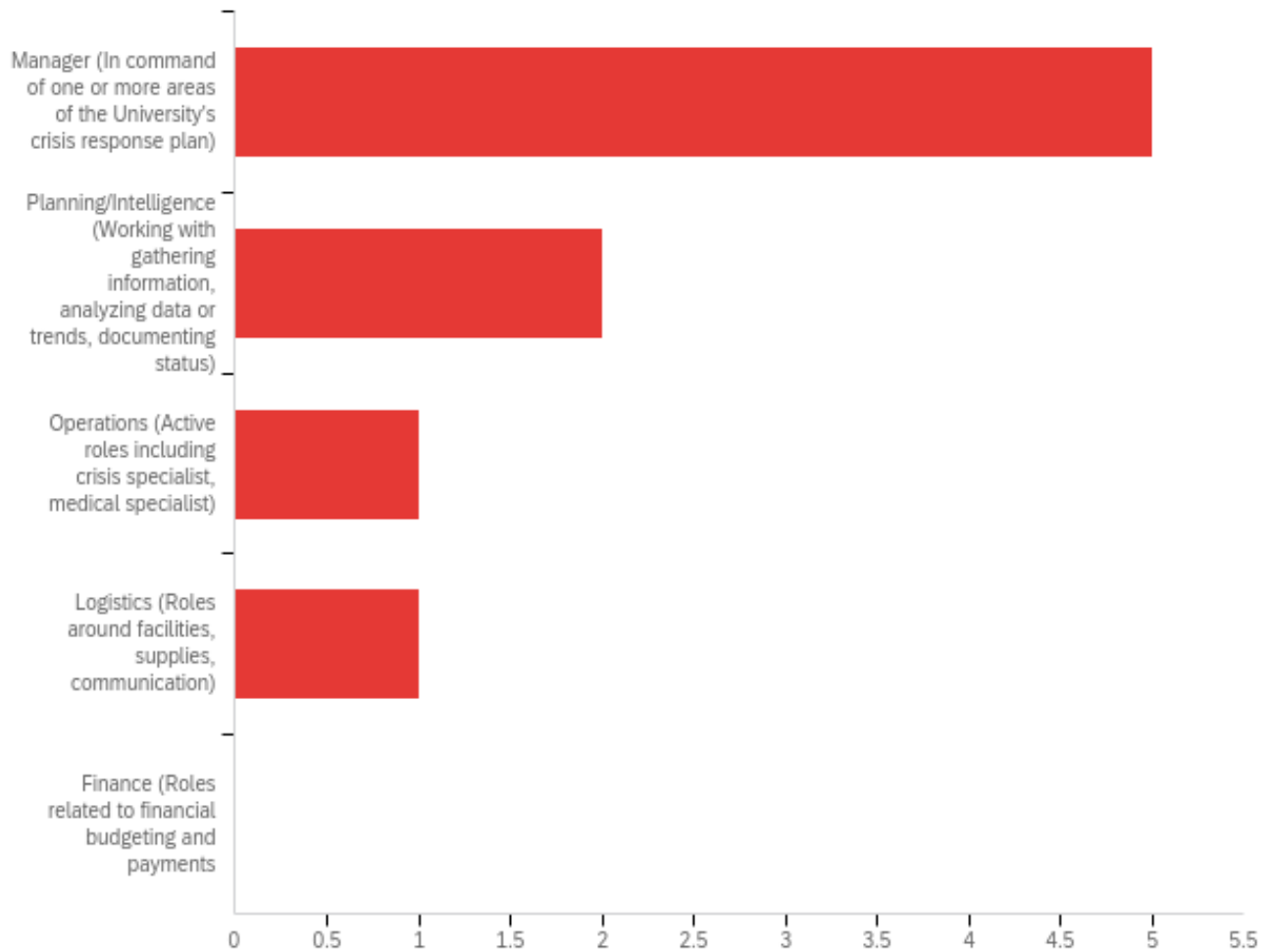
#	Answer	%	Count
1	1 - Fully Prepared	18.18%	4
2	2 - Well Prepared (but some small gaps)	50.00%	11
3	3 - Prepared (but some large gaps)	31.82%	7
4	4 - Ill Prepared	0.00%	0
	Total	100%	22

A2 - Were you involved in crisis management planning or enactment of a crisis management plan?



#	Answer	%	Count
25	Yes	54.55%	12
26	No	45.45%	10
	Total	100%	22

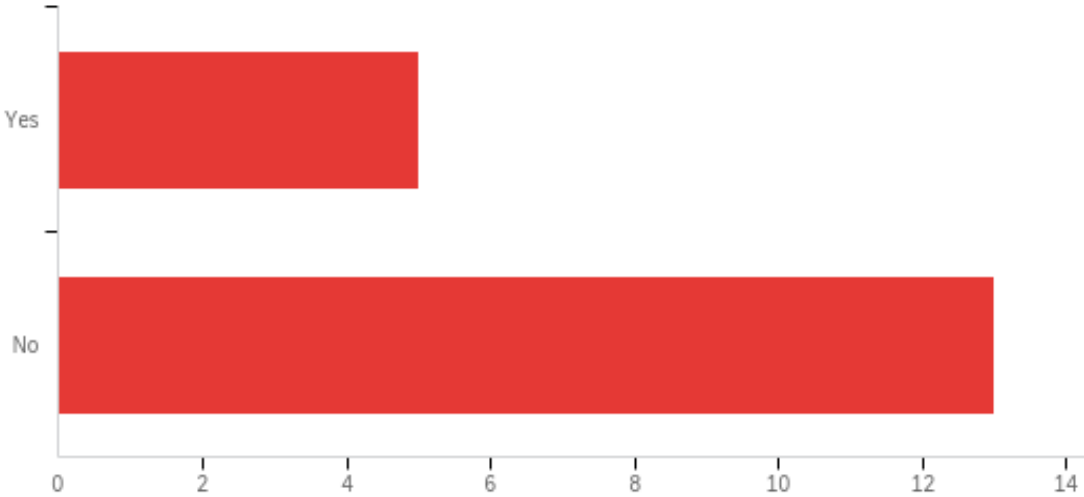
A3 - What general role did you make play in the University crisis response?(If no direct match, pick the one that is closest to the role you played)



#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	What general role did you make play in the University crisis response?(If no direct match, pick the one that is closest to the role you played)	4.00	7.00	4.78	1.03	1.06	9

#	Answer	%	Count
4	Manager (In command of one or more areas of the University's crisis response plan)	55.56%	5
5	Planning/Intelligence (Working with gathering information, analyzing data or trends, documenting status)	22.22%	2
6	Operations (Active roles including crisis specialist, medical specialist)	11.11%	1
7	Logistics (Roles around facilities, supplies, communication)	11.11%	1
8	Finance (Roles related to financial budgeting and payments)	0.00%	0
	Total	100%	9

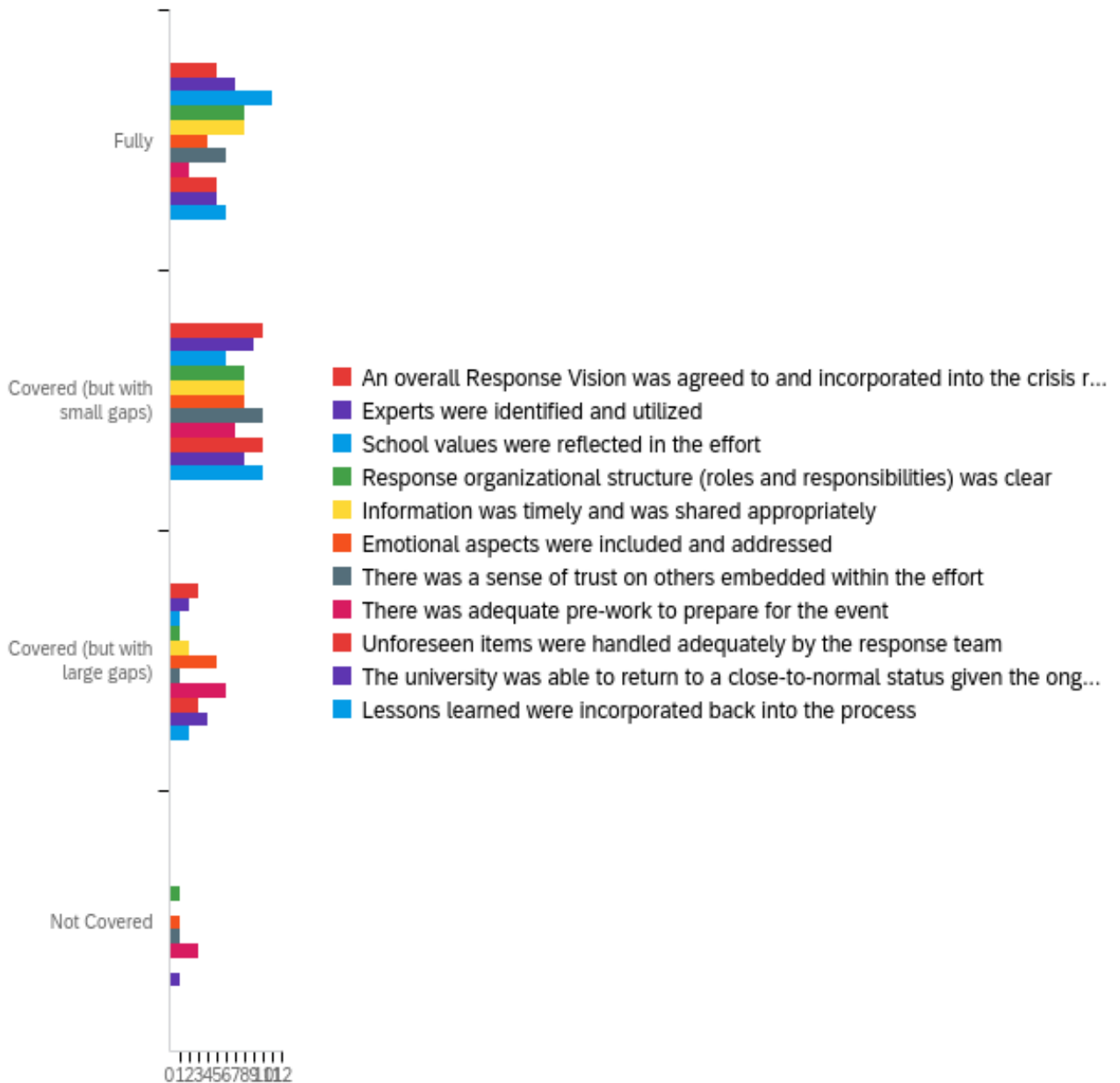
A4 - Was the University crisis response ever practiced or tested at a University-wide level prior to the Pandemic?



#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Was the University crisis response ever practiced or tested at a University-wide level prior to the Pandemic?	23.00	24.00	23.72	0.45	0.20	18

#	Answer	%	Count
23	Yes	27.78%	5
24	No	72.22%	13
	Total	100%	18

A5 - How well do you think the following areas were covered in relation to the school's crisis management efforts?



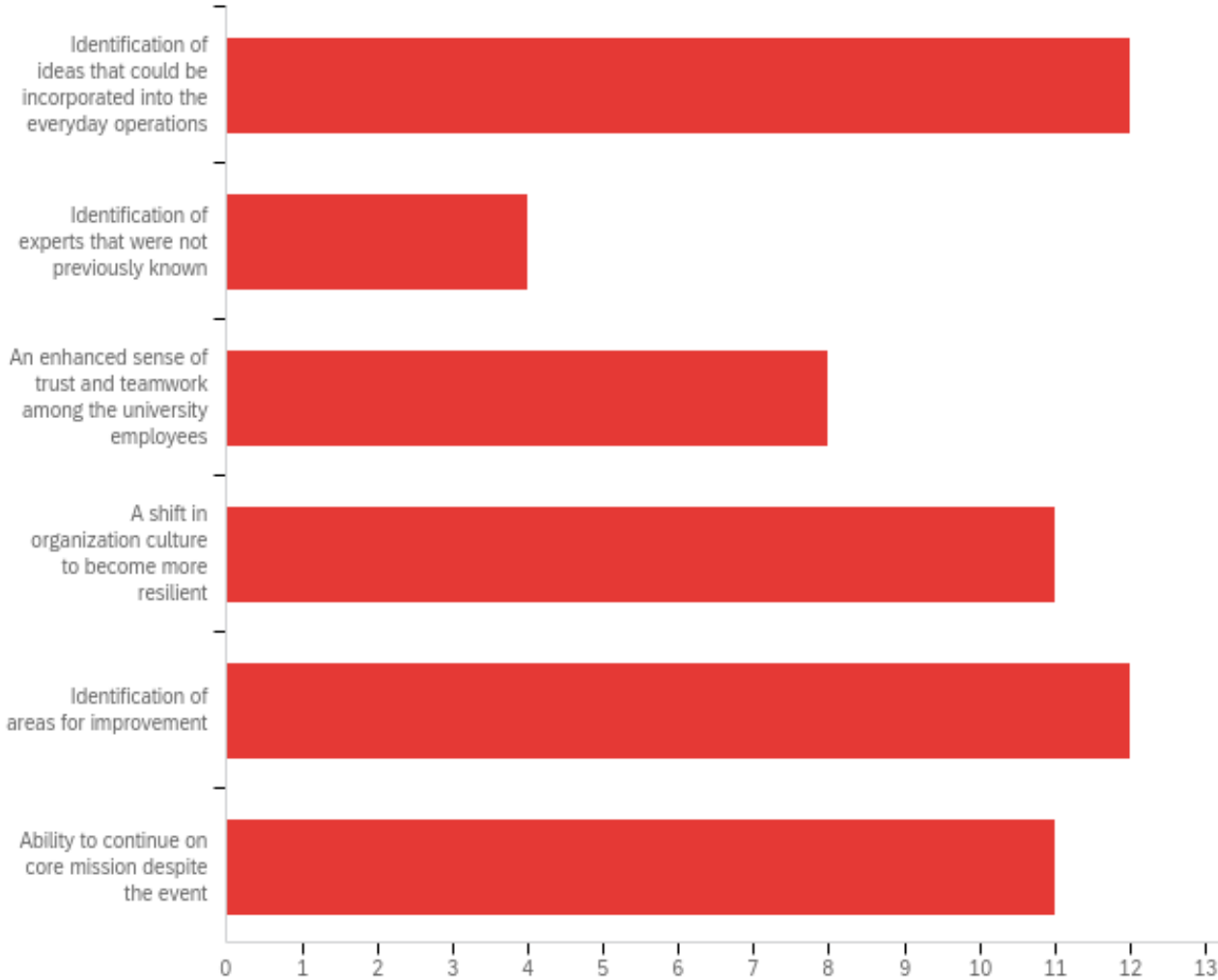
#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	An overall Response Vision was agreed to and incorporated into the crisis response	1.00	3.00	1.89	0.66	0.43	18
2	Experts were identified and utilized	1.00	3.00	1.72	0.65	0.42	18

3	School values were reflected in the effort	1.00	3.00	1.44	0.60	0.36	18
4	Response organizational structure (roles and responsibilities) was clear	1.00	4.00	1.72	0.80	0.65	18
5	Information was timely and was shared appropriately	1.00	3.00	1.67	0.67	0.44	18
6	Emotional aspects were included and addressed	1.00	4.00	2.17	0.83	0.69	18
7	There was a sense of trust on others embedded within the effort	1.00	4.00	1.83	0.76	0.58	18
8	There was adequate pre-work to prepare for the event	1.00	4.00	2.56	0.90	0.80	18
9	Unforeseen items were handled adequately by the response team	1.00	3.00	1.89	0.66	0.43	18
10	The university was able to return to a close-to-normal status given the ongoing situation	1.00	4.00	2.06	0.85	0.72	18
11	Lessons learned were incorporated back into the process	1.00	3.00	1.78	0.63	0.40	18

#	Question	Fully		Covered (but with small gaps)		Covered (but with large gaps)		Not Covered		Total
1	An overall Response Vision was agreed to and incorporated into the crisis response	27.78%	5	55.56%	10	16.67%	3	0.00%	0	18
2	Experts were identified and utilized	38.89%	7	50.00%	9	11.11%	2	0.00%	0	18
3	School values were reflected in the effort	61.11%	11	33.33%	6	5.56%	1	0.00%	0	18
4	Response organizational structure (roles and responsibilities) was clear	44.44%	8	44.44%	8	5.56%	1	5.56%	1	18
5	Information was timely and was shared appropriately	44.44%	8	44.44%	8	11.11%	2	0.00%	0	18

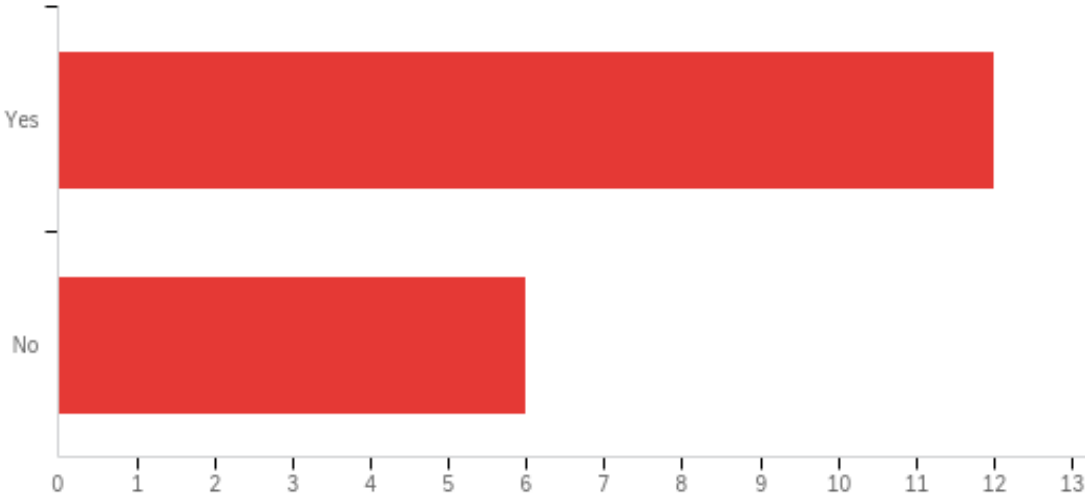
6	Emotional aspects were included and addressed	22.22%	4	44.44%	8	27.78%	5	5.56%	1	18
7	There was a sense of trust on others embedded within the effort	33.33%	6	55.56%	10	5.56%	1	5.56%	1	18
8	There was adequate pre-work to prepare for the event	11.11%	2	38.89%	7	33.33%	6	16.67%	3	18
9	Unforeseen items were handled adequately by the response team	27.78%	5	55.56%	10	16.67%	3	0.00%	0	18
10	The university was able to return to a close-to-normal status given the ongoing situation	27.78%	5	44.44%	8	22.22%	4	5.56%	1	18
11	Lessons learned were incorporated back into the process	33.33%	6	55.56%	10	11.11%	2	0.00%	0	18

A6 - What areas, if any, do you feel were positives coming out of this crisis management effort? (check all that apply)



#	Answer	%	Count
3	Identification of ideas that could be incorporated into the everyday operations	20.69%	12
4	Identification of experts that were not previously known	6.90%	4
5	An enhanced sense of trust and teamwork among the university employees	13.79%	8
7	A shift in organization culture to become more resilient	18.97%	11
8	Identification of areas for improvement	20.69%	12
9	Ability to continue on core mission despite the event	18.97%	11
	Total	100%	58

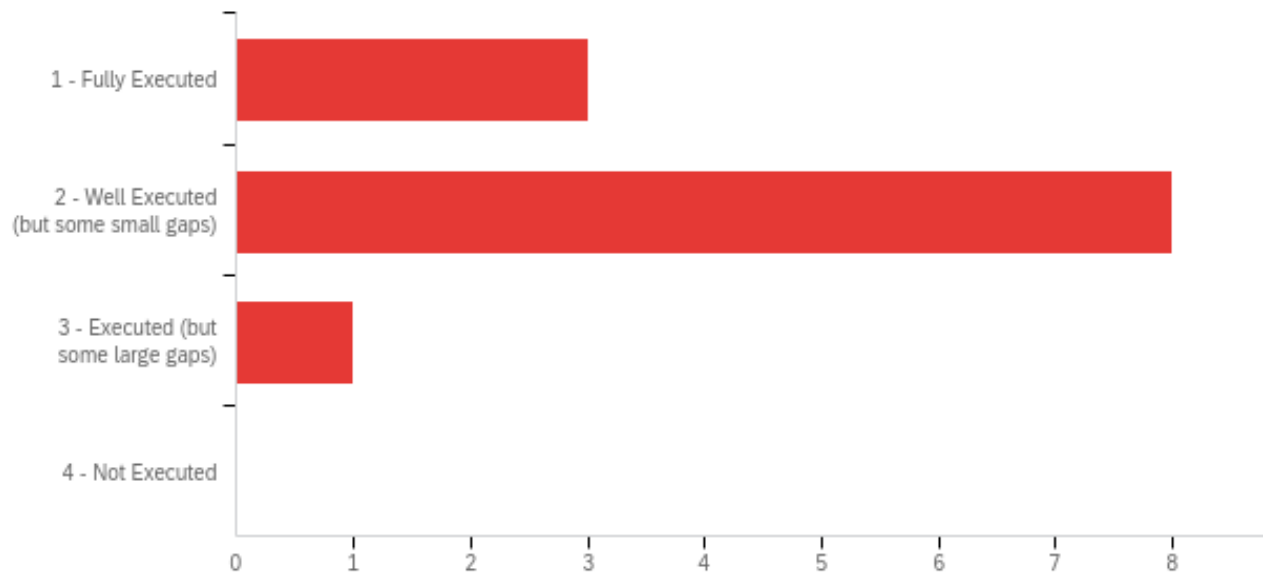
A7 - Do you feel that that Missouri State had a formal crisis management plan in place when the Pandemic occurred?



#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Do you feel that that Missouri State had a formal crisis management plan in place when the Pandemic occurred?	24.00	25.00	24.33	0.47	0.22	18

#	Answer	%	Count
24	Yes	66.67%	12
25	No	33.33%	6
	Total	100%	18

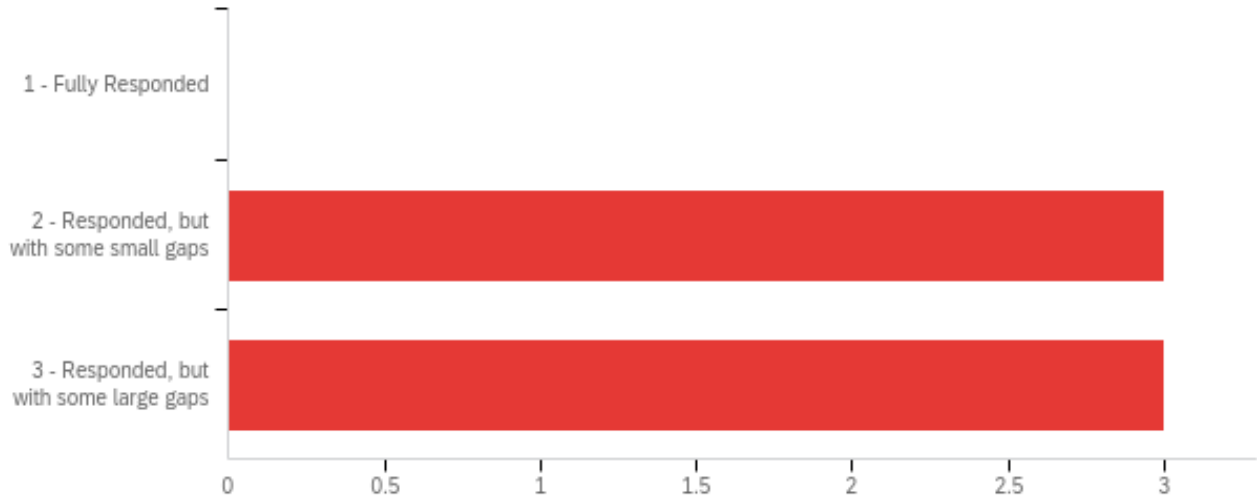
A8 - How well do you feel the crisis management plan was executed?



#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	How well do you feel the crisis management plan was executed?	1.00	3.00	1.83	0.55	0.31	12

#	Answer	%	Count
1	1 - Fully Executed	25.00%	3
2	2 - Well Executed (but some small gaps)	66.67%	8
3	3 - Executed (but some large gaps)	8.33%	1
4	4 - Not Executed	0.00%	0
	Total	100%	12

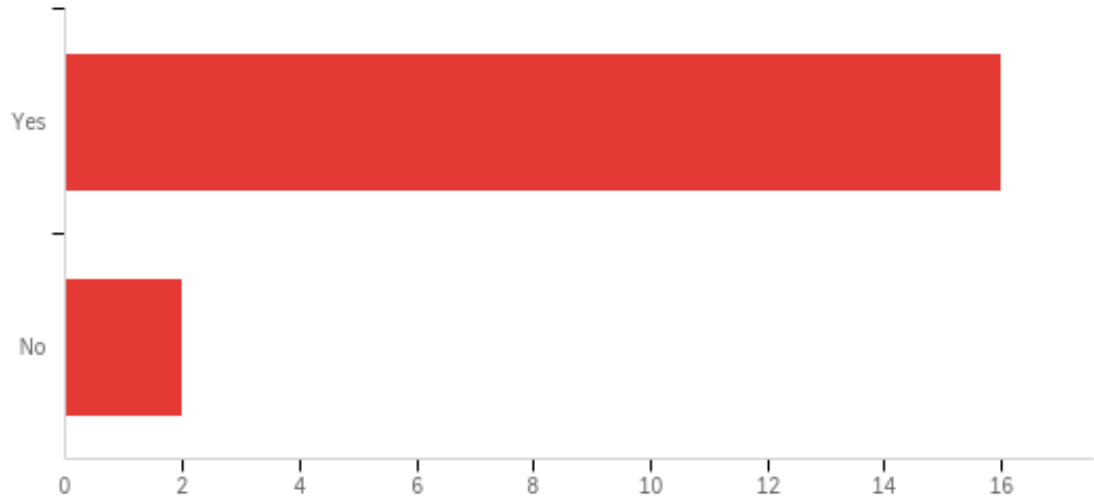
A9 - How well do you feel Missouri State responded to the Pandemic in light of having no crisis management plan?



#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	How well do you feel Missouri State responded to the Pandemic in light of having no crisis management plan?	2.00	3.00	2.50	0.50	0.25	6

#	Answer	%	Count
1	1 - Fully Responded	0.00%	0
2	2 - Responded, but with some small gaps	50.00%	3
3	3 - Responded, but with some large gaps	50.00%	3
	Total	100%	6

A10 - Do you feel there was adequate communication from the administration and crisis team to the faculty, staff, and students during the event?



#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Do you feel there was adequate communication from the administration and crisis team to the faculty, staff, and students during the event?	1.00	2.00	1.11	0.31	0.10	18

#	Answer	%	Count
1	Yes	88.89%	16
2	No	11.11%	2
	Total	100%	18

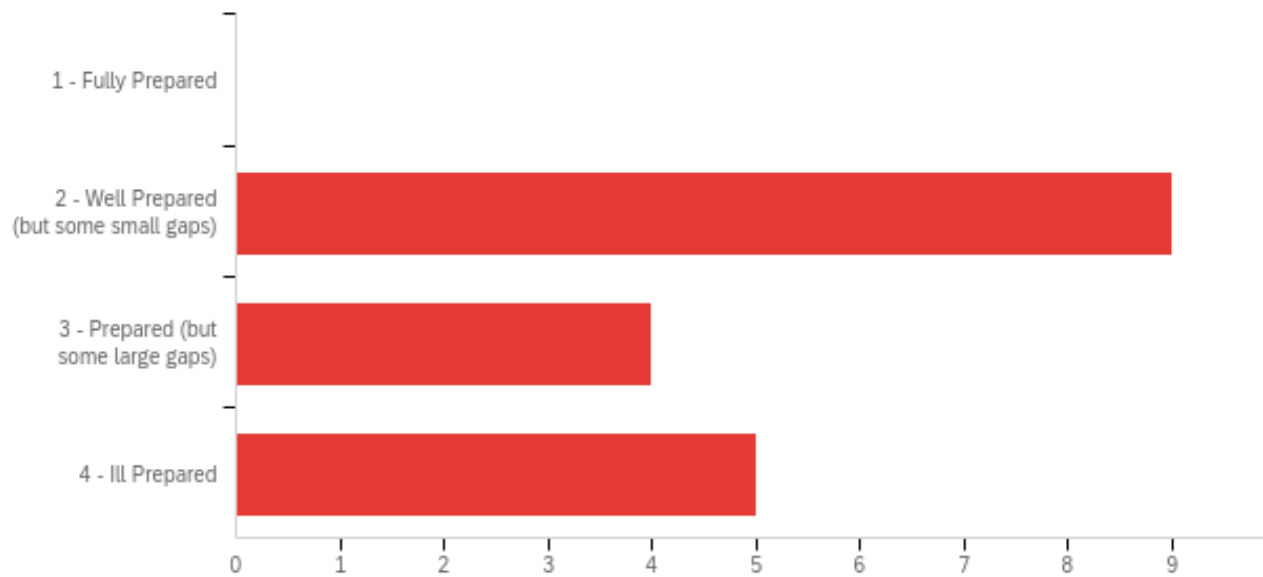
A11 - Can you give more insight on what you felt was missing?

Can you give more insight on what you felt was missing?

Department Head (who should have been a source of information) kept blaming the crisis for her lack of management ability.

At times, it appeared that the University made decisions based on popular opinion versus facts/science. Because there was resistance by some in upper-administration to rely on scientific information rather than popularity polls, delays occurred in decision making. The evolution of the masking policy is a prime example. Additionally, some administrators seemed to hold back on making important decisions in fear of diminishing their popularity on campus and on social media. At one point over the summer, I stopped waiting on upper-administration to make important decisions and started making the decisions on my own. It was incredibly frustrating.

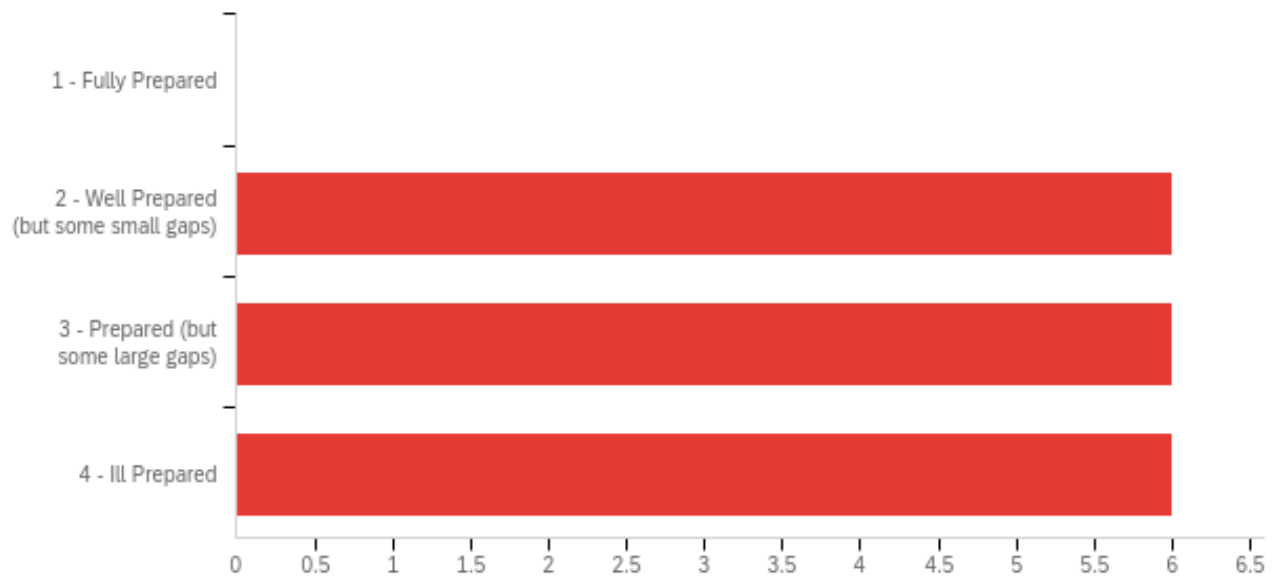
A12 - With regards to the faculty and staff of the University, rate their level of readiness for the Pandemic event



#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	With regards to the faculty and staff of the University, rate their level of readiness for the Pandemic event	2.00	4.00	2.78	0.85	0.73	18

#	Answer	%	Count
1	1 - Fully Prepared	0.00%	0
2	2 - Well Prepared (but some small gaps)	50.00%	9
3	3 - Prepared (but some large gaps)	22.22%	4
4	4 - Ill Prepared	27.78%	5
	Total	100%	18

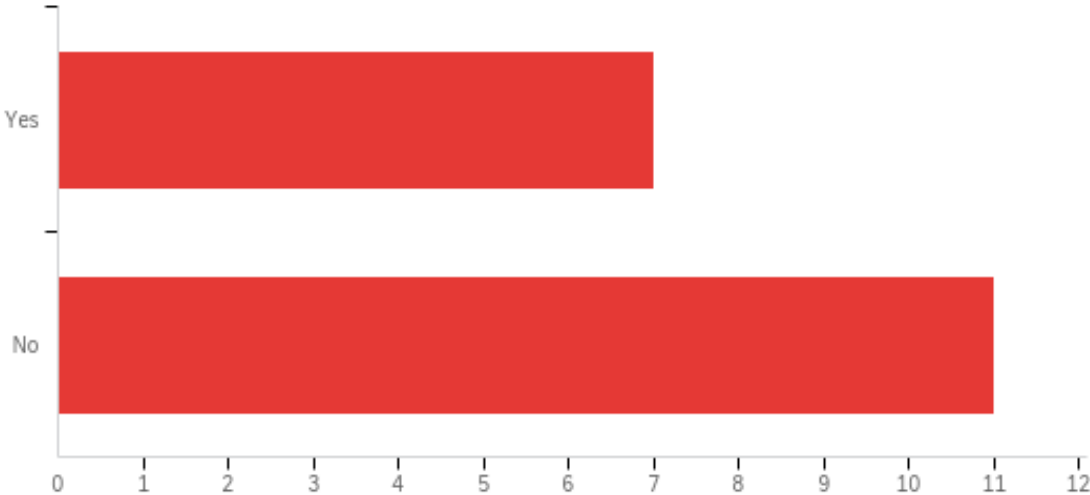
A13 - With regards to the students of the University, rate their level of readiness for the Pandemic event



#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	With regards to the students of the University, rate their level of readiness for the Pandemic event	2.00	4.00	3.00	0.82	0.67	18

#	Answer	%	Count
1	1 - Fully Prepared	0.00%	0
2	2 - Well Prepared (but some small gaps)	33.33%	6
3	3 - Prepared (but some large gaps)	33.33%	6
4	4 - Ill Prepared	33.33%	6
	Total	100%	18

A14 - Would you be willing to participate in a 15-30 minute follow-up interview related to your answers on this survey?



#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Would you be willing to participate in a 15-30 minute follow-up interview related to your answers on this survey?	23.00	24.00	23.61	0.49	0.24	18

#	Answer	%	Count
23	Yes	38.89%	7
24	No	61.11%	11
	Total	100%	18

Q17 - Please enter your email address so that we may contact you in the future regarding an interview. Thank you!

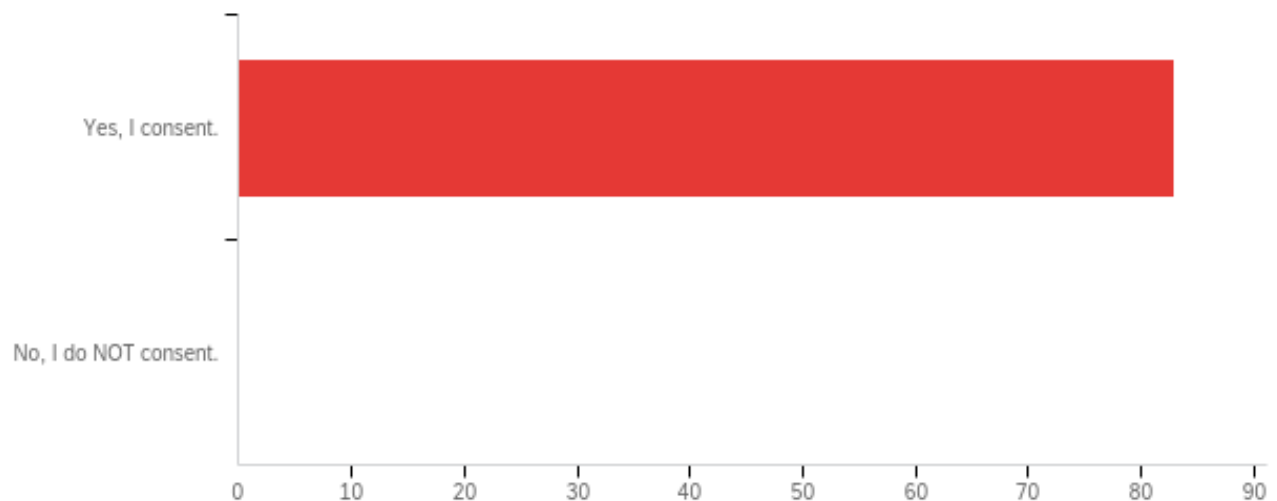
Deleted to maintain confidentiality!

Faculty Survey Results

Default Report

Missouri State Crisis Management / Faculty

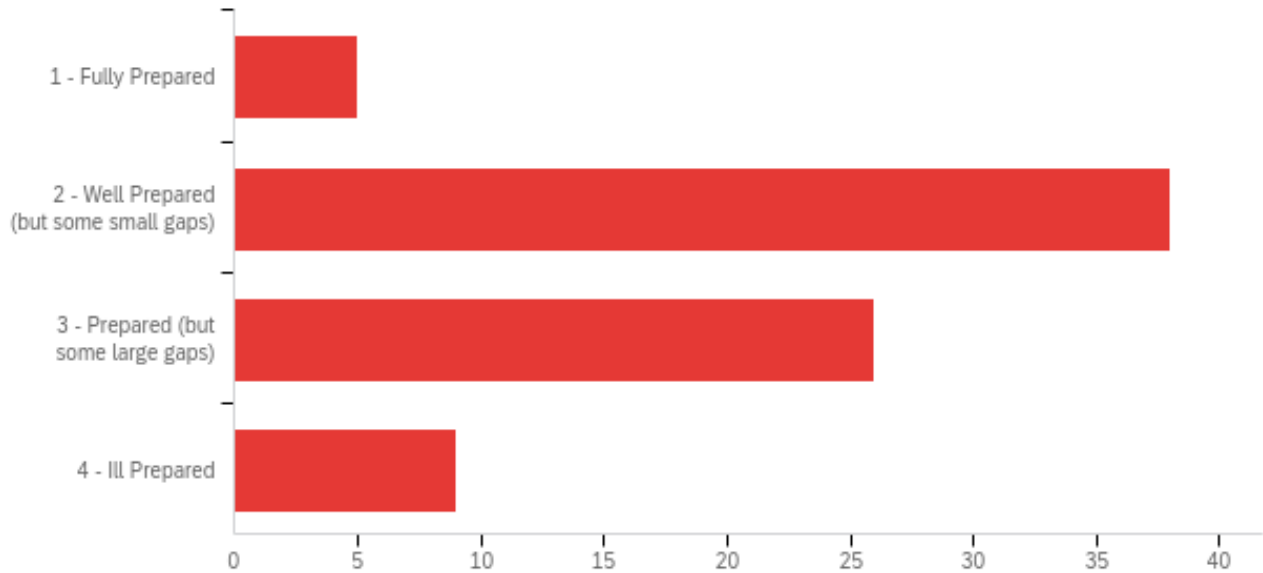
Q1 - These questions will help garner information related to Missouri State University's planning and response to the COVID-19 Pandemic event. This information is being collected as part of a Capstone Project for doctoral candidate, David Capps, who is seeking an Ed.D from Vanderbilt University. David obtained his B.S. and M.S. degrees in Computer Information Systems from Missouri State, and cares very deeply about his alma mater. He is hoping to utilize the information from this research, along with his expertise in disaster recovery and risk management to create recommendations that will help mature Missouri State's resilience practices. David lives in New York and is currently a leader in Risk Management for the Federal Reserve Bank of New York. He also has experience working in higher education at Fordham University, and will look to draw upon his past experience in crafting appropriate and sustainable solutions. The information that is being collected will be kept confidential. Please check the box below if you consent to proceeding with this survey.



#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	These questions will help garner information related to Missouri State University's planning and response to the COVID-19 Pandemic event. This information is being collected as part of a Capstone Project for doctoral candidate, David Capps, who is seeking an Ed.D from Vanderbilt University. David obtained his B.S. and M.S. degrees in Computer Information Systems from Missouri State, and cares very deeply about his alma mater. He is is hoping to utilize the information from this research, along with his expertise in disaster recovery and risk management to create recommendations that will help mature Missouri State's resilience practices. David lives in New York and is currently a leader in Risk Management for the Federal Reserve Bank of New York. He also has experience working in higher education at Fordham University, and will look to draw upon his past experience in crafting appropriate and sustainable solutions. The information that is being collected will be kept confidential. Please check the box below if you consent to proceeding with this survey.	1.00	1.00	1.00	0.00	0.00	83

#	Answer	%	Count
1	Yes, I consent.	100.00%	83
2	No, I do NOT consent.	0.00%	0
	Total	100%	83

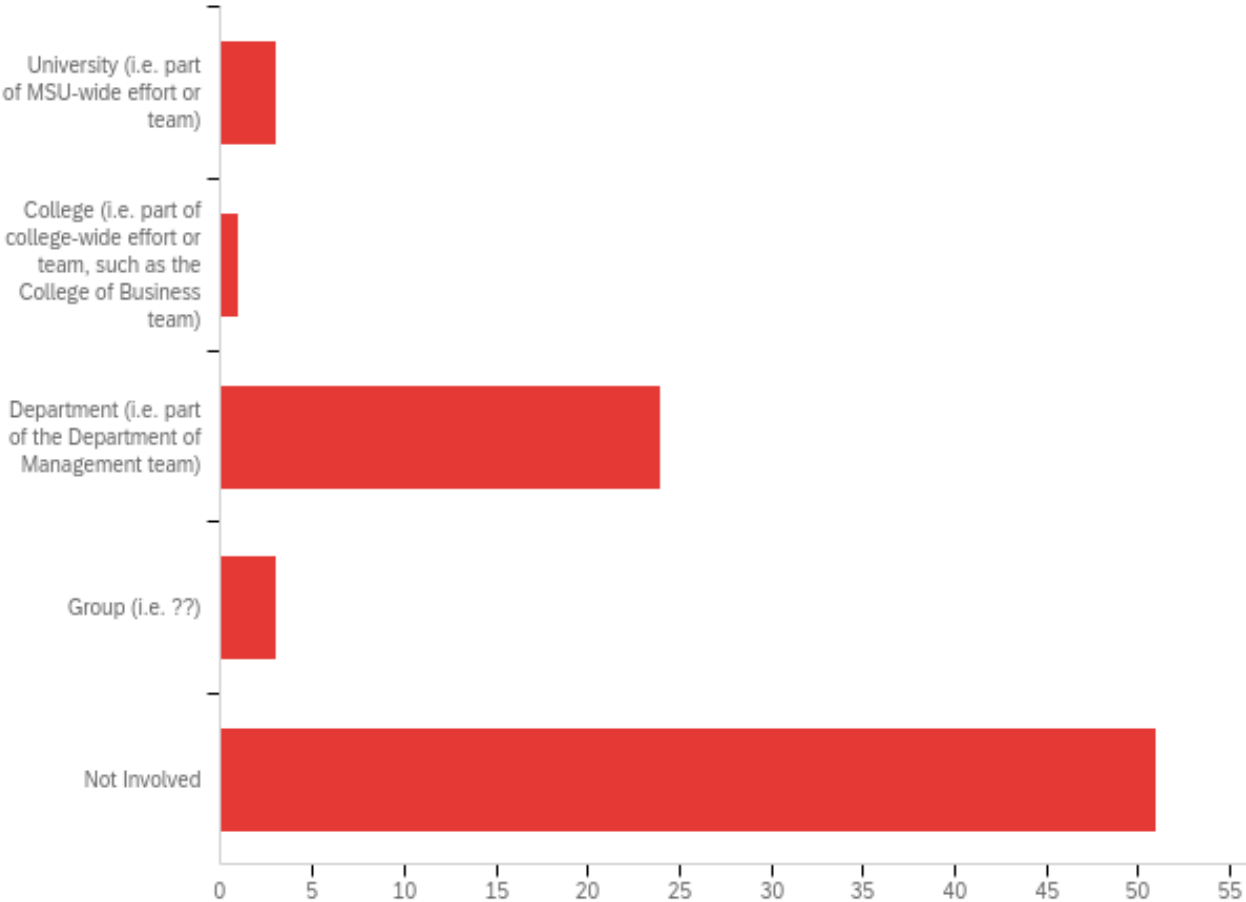
F1 - How well do you feel Missouri State overall was prepared for the Pandemic event?



#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	How well do you feel Missouri State overall was prepared for the Pandemic event?	1.00	4.00	2.50	0.78	0.61	78

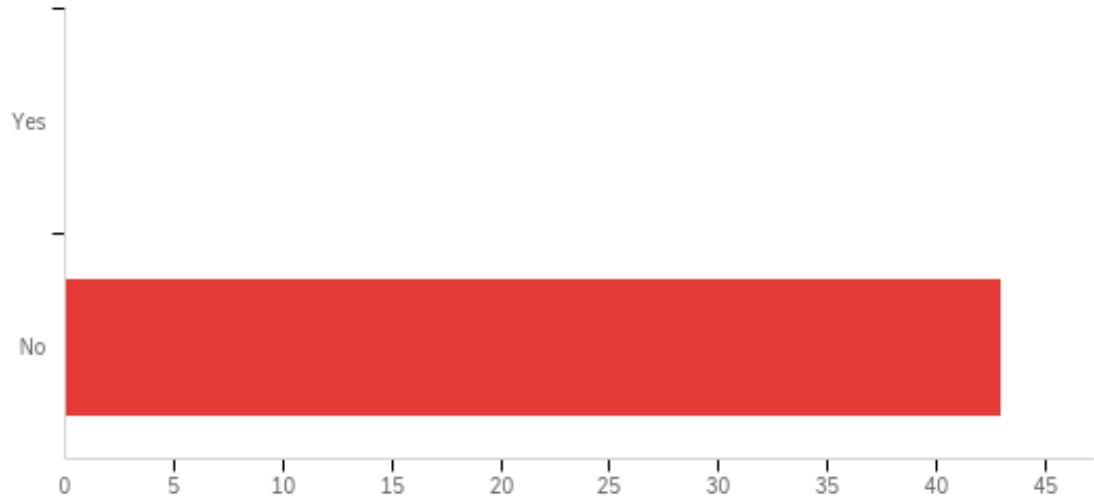
#	Answer	%	Count
1	1 - Fully Prepared	6.41%	5
2	2 - Well Prepared (but some small gaps)	48.72%	38
3	3 - Prepared (but some large gaps)	33.33%	26
4	4 - Ill Prepared	11.54%	9
	Total	100%	78

F2 - At what level of Missouri State were you involved in crisis management planning or enactment of a crisis management plan?



#	Answer	%	Count
1	University (i.e. part of MSU-wide effort or team)	3.66%	3
2	College (i.e. part of college-wide effort or team, such as the College of Business team)	1.22%	1
3	Department (i.e. part of the Department of Management team)	29.27%	24
4	Group (i.e. ??)	3.66%	3
5	Not Involved	62.20%	51
	Total	100%	82

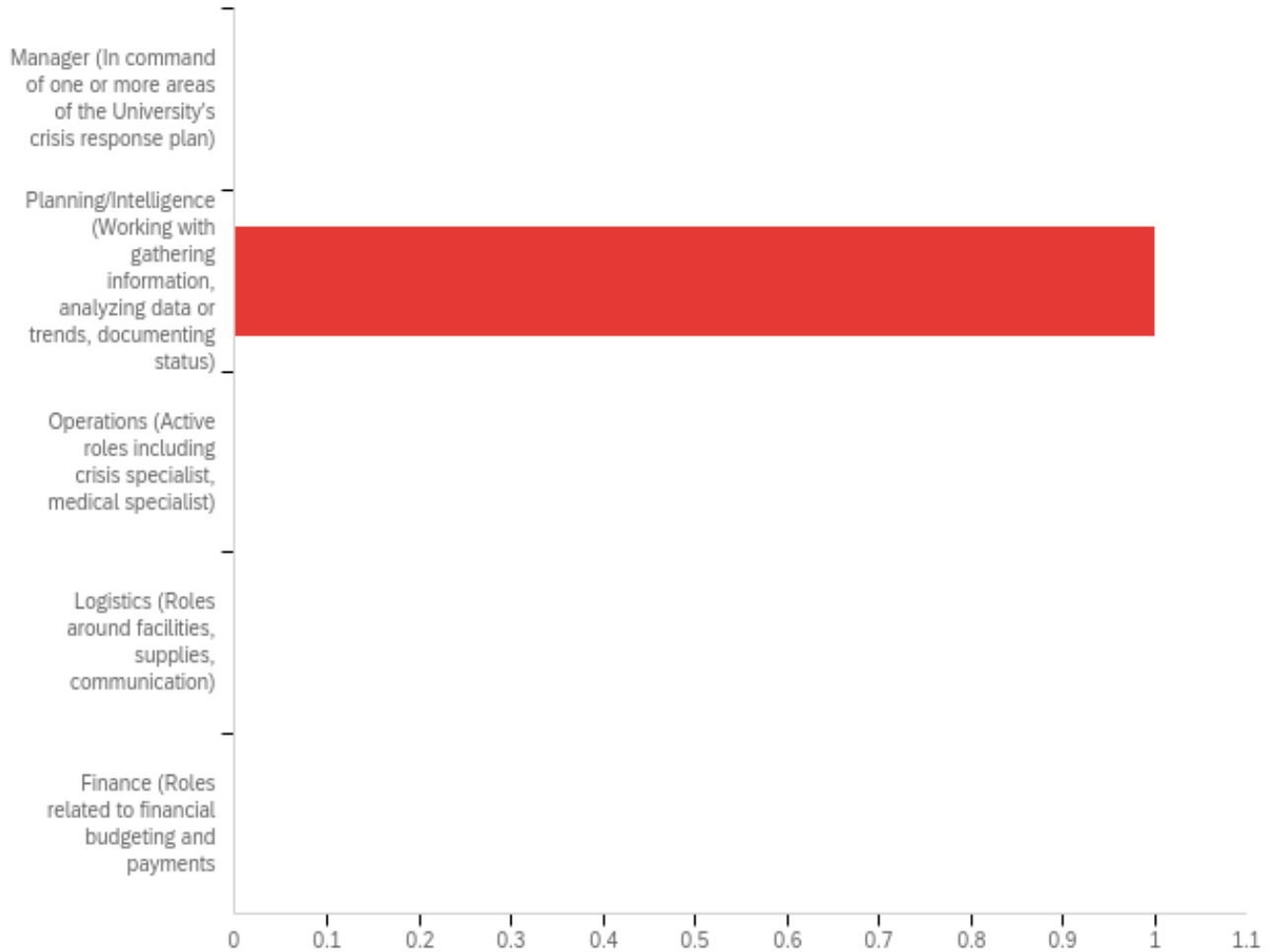
F2B - Were you ever involved in any testing or practice of a crisis management response, such as a disaster recovery test?



#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Were you ever involved in any testing or practice of a crisis management response, such as a disaster recovery test?	24.00	24.00	24.00	0.00	0.00	43

#	Answer	%	Count
23	Yes	0.00%	0
24	No	100.00%	43
	Total	100%	43

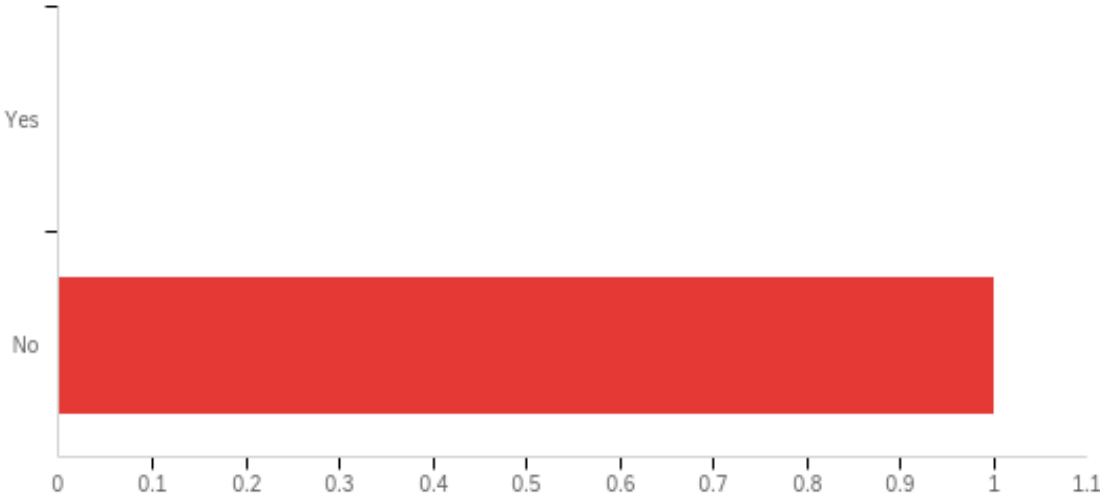
F3A - What general role did you make play in the University crisis response?(If no direct match, pick the one that is closest to the role you played)



#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	What general role did you make play in the University crisis response?(If no direct match, pick the one that is closest to the role you played)	5.00	5.00	5.00	0.00	0.00	1

#	Answer	%	Count
4	Manager (In command of one or more areas of the University's crisis response plan)	0.00%	0
5	Planning/Intelligence (Working with gathering information, analyzing data or trends, documenting status)	100.00%	1
6	Operations (Active roles including crisis specialist, medical specialist)	0.00%	0
7	Logistics (Roles around facilities, supplies, communication)	0.00%	0
8	Finance (Roles related to financial budgeting and payments)	0.00%	0
	Total	100%	1

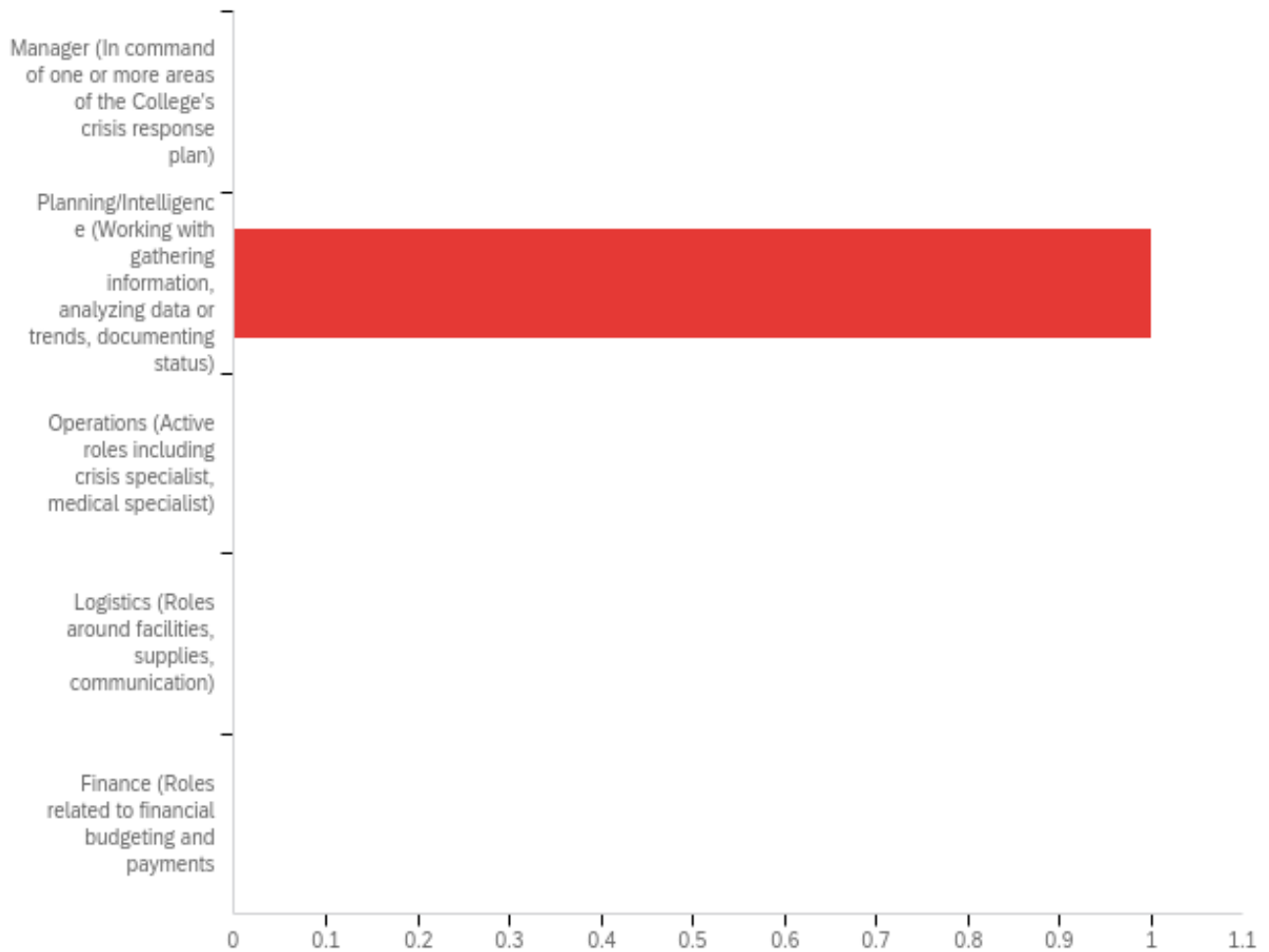
F3B - Was the University crisis response ever practiced or tested at a University-wide level prior to the Pandemic?



#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Was the University crisis response ever practiced or tested at a University-wide level prior to the Pandemic?	24.00	24.00	24.00	0.00	0.00	1

#	Answer	%	Count
23	Yes	0.00%	0
24	No	100.00%	1
	Total	100%	1

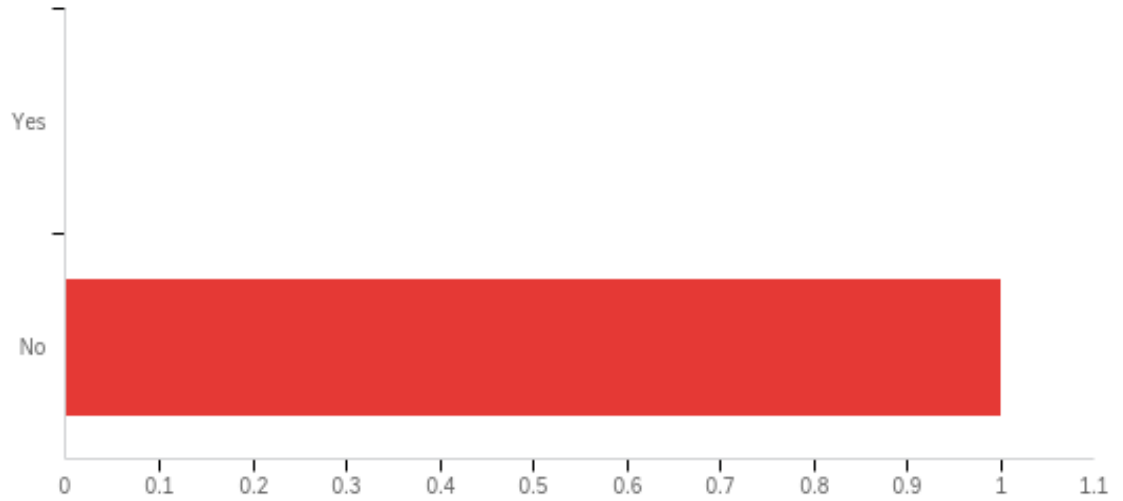
F4A - What general role did you make play in the specific College crisis response? (If no direct match, pick the one that is closest to the role you played)



#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	What general role did you make play in the specific College crisis response? (If no direct match, pick the one that is closest to the role you played)	5.00	5.00	5.00	0.00	0.00	1

#	Answer	%	Count
4	Manager (In command of one or more areas of the College's crisis response plan)	0.00%	0
5	Planning/Intelligence (Working with gathering information, analyzing data or trends, documenting status)	100.00%	1
6	Operations (Active roles including crisis specialist, medical specialist)	0.00%	0
7	Logistics (Roles around facilities, supplies, communication)	0.00%	0
8	Finance (Roles related to financial budgeting and payments)	0.00%	0
	Total	100%	1

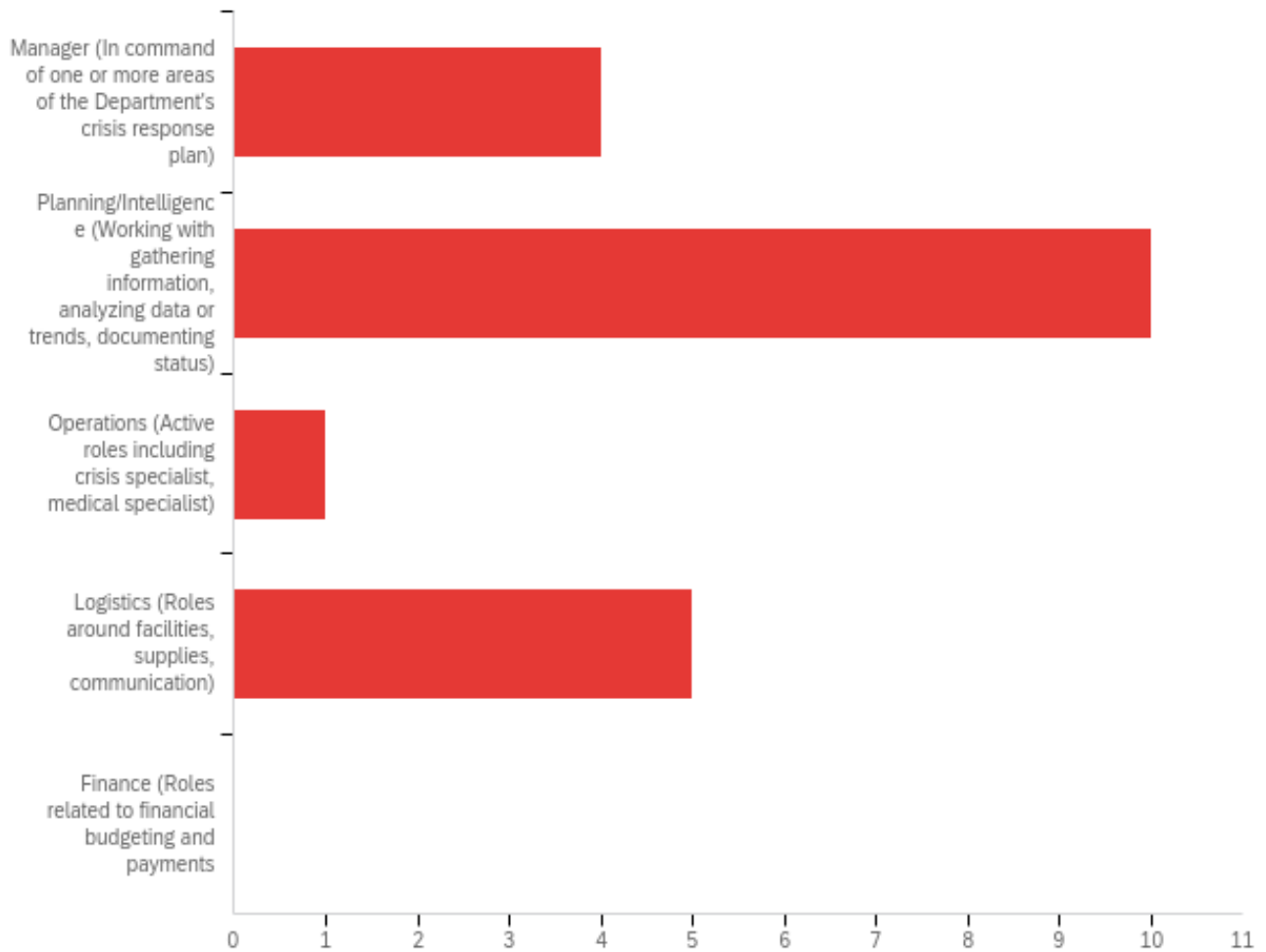
F4B - Was the College crisis response ever practiced or tested at a College-wide level prior to the Pandemic?



#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Was the College crisis response ever practiced or tested at a College-wide level prior to the Pandemic?	24.00	24.00	24.00	0.00	0.00	1

#	Answer	%	Count
23	Yes	0.00%	0
24	No	100.00%	1
	Total	100%	1

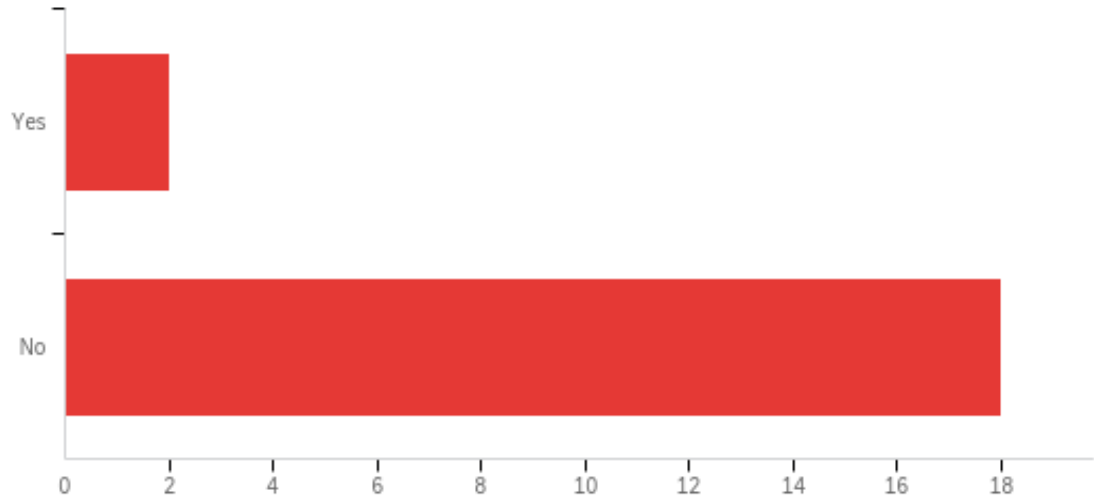
F5A - What general role did you make play in the specific Department crisis response? (If no direct match, pick the one that is closest to the role you played)



#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	What general role did you make play in the specific Department crisis response? (If no direct match, pick the one that is closest to the role you played)	4.00	7.00	5.35	1.06	1.13	20

#	Answer	%	Count
4	Manager (In command of one or more areas of the Department's crisis response plan)	20.00%	4
5	Planning/Intelligence (Working with gathering information, analyzing data or trends, documenting status)	50.00%	10
6	Operations (Active roles including crisis specialist, medical specialist)	5.00%	1
7	Logistics (Roles around facilities, supplies, communication)	25.00%	5
8	Finance (Roles related to financial budgeting and payments)	0.00%	0
	Total	100%	20

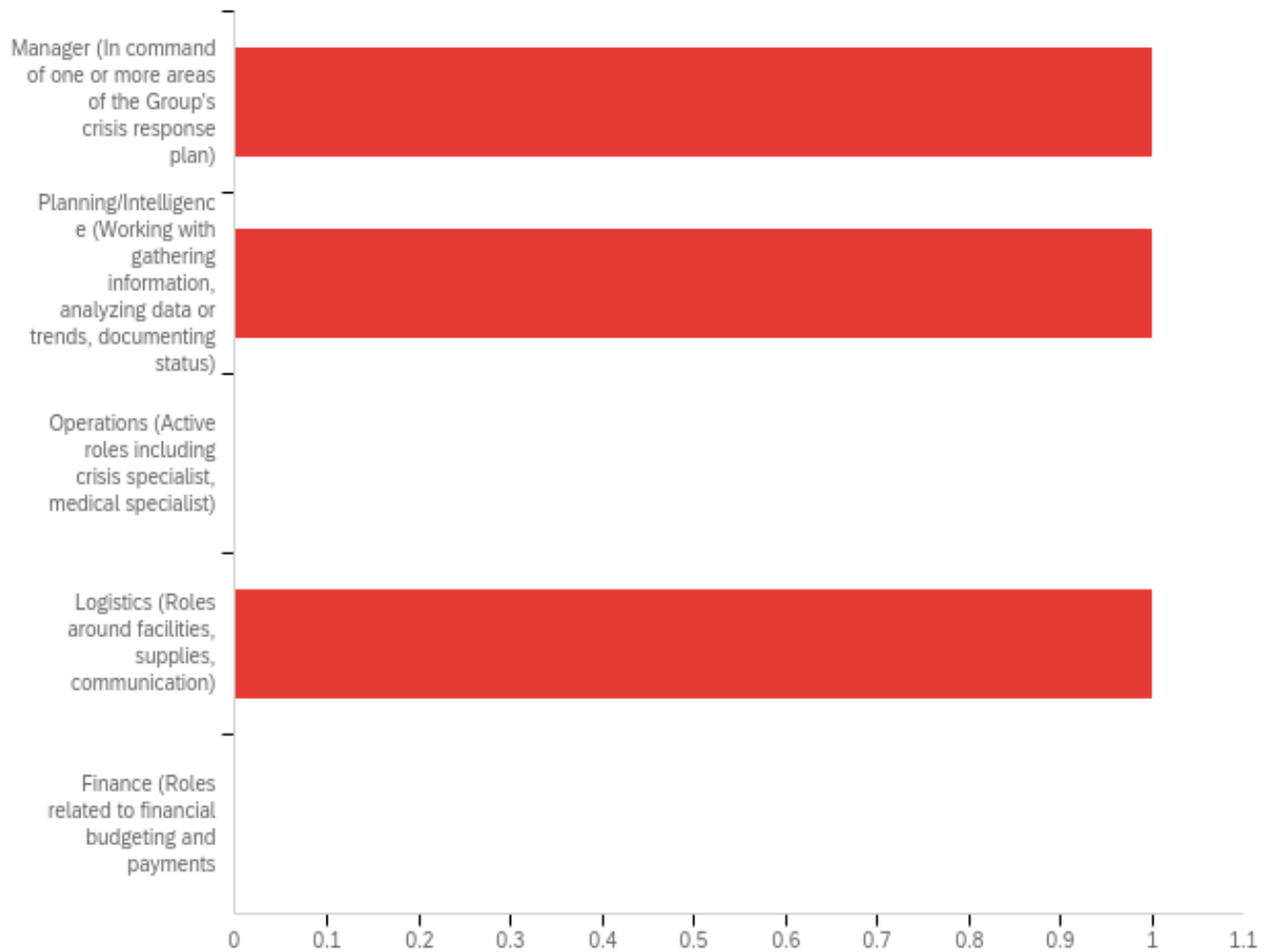
F5B - Was the Department crisis response ever practiced or tested at a Department-wide level prior to the Pandemic?



#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Was the Department crisis response ever practiced or tested at a Department-wide level prior to the Pandemic?	23.00	24.00	23.90	0.30	0.09	20

#	Answer	%	Count
23	Yes	10.00%	2
24	No	90.00%	18
	Total	100%	20

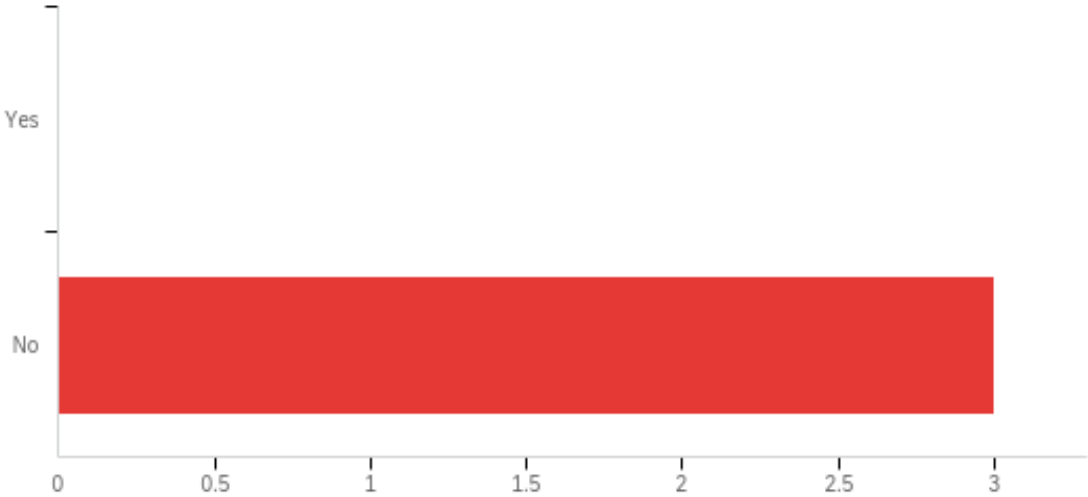
F6A - What general role did you make play in the specific Group crisis response?(If no direct match, pick the one that is closest to the role you played)



#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	What general role did you make play in the specific Group crisis response?(If no direct match, pick the one that is closest to the role you played)	4.00	7.00	5.33	1.25	1.56	3

#	Answer	%	Count
4	Manager (In command of one or more areas of the Group's crisis response plan)	33.33%	1
5	Planning/Intelligence (Working with gathering information, analyzing data or trends, documenting status)	33.33%	1
6	Operations (Active roles including crisis specialist, medical specialist)	0.00%	0
7	Logistics (Roles around facilities, supplies, communication)	33.33%	1
8	Finance (Roles related to financial budgeting and payments)	0.00%	0
	Total	100%	3

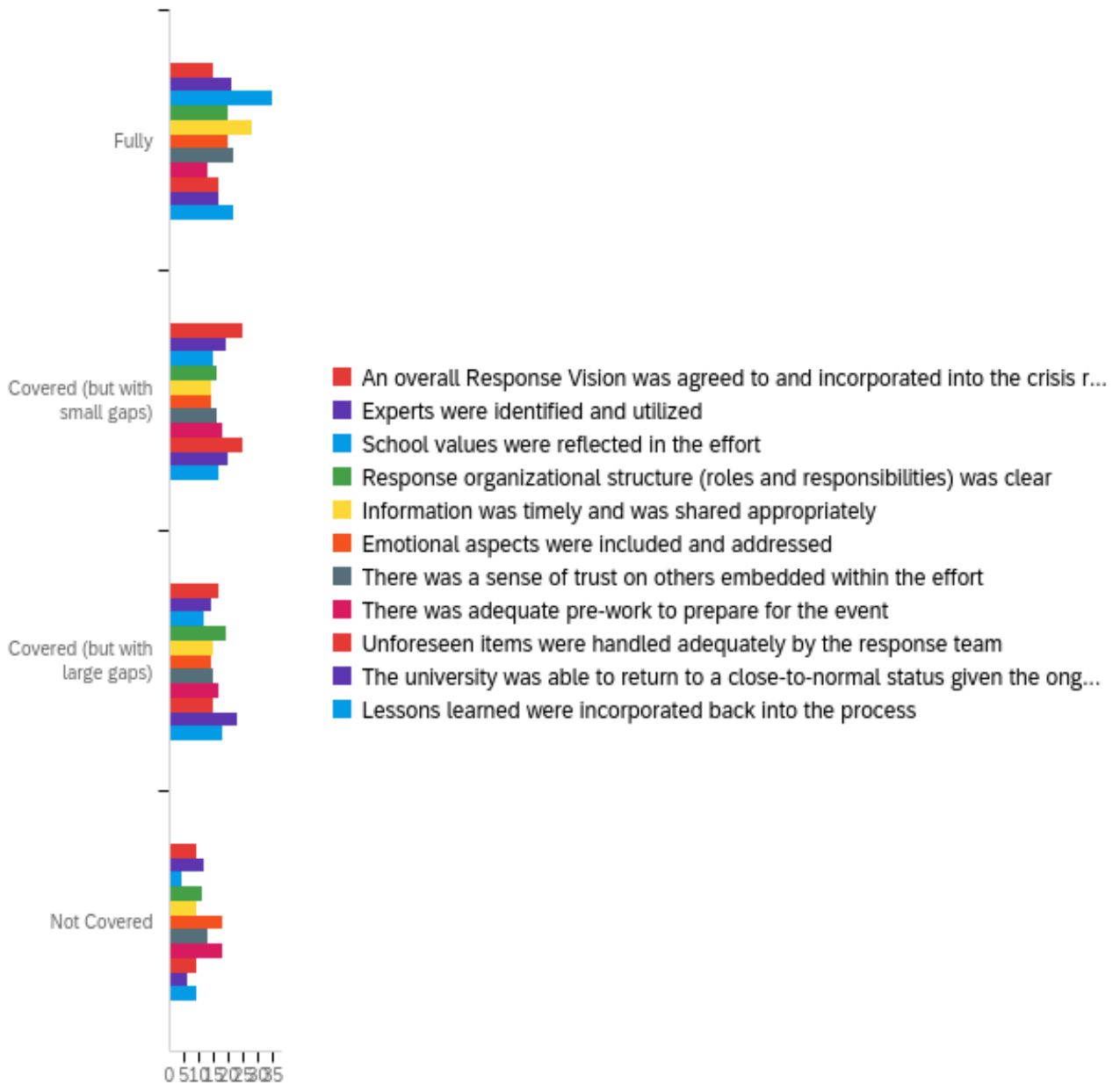
F6B - Was the Group crisis response ever practiced or tested at a Group-wide level prior to the Pandemic?



#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Was the Group crisis response ever practiced or tested at a Group-wide level prior to the Pandemic?	24.00	24.00	24.00	0.00	0.00	3

#	Answer	%	Count
23	Yes	0.00%	0
24	No	100.00%	3
	Total	100%	3

F7 - How well do you think the following areas were covered in relation to the school's crisis management efforts?



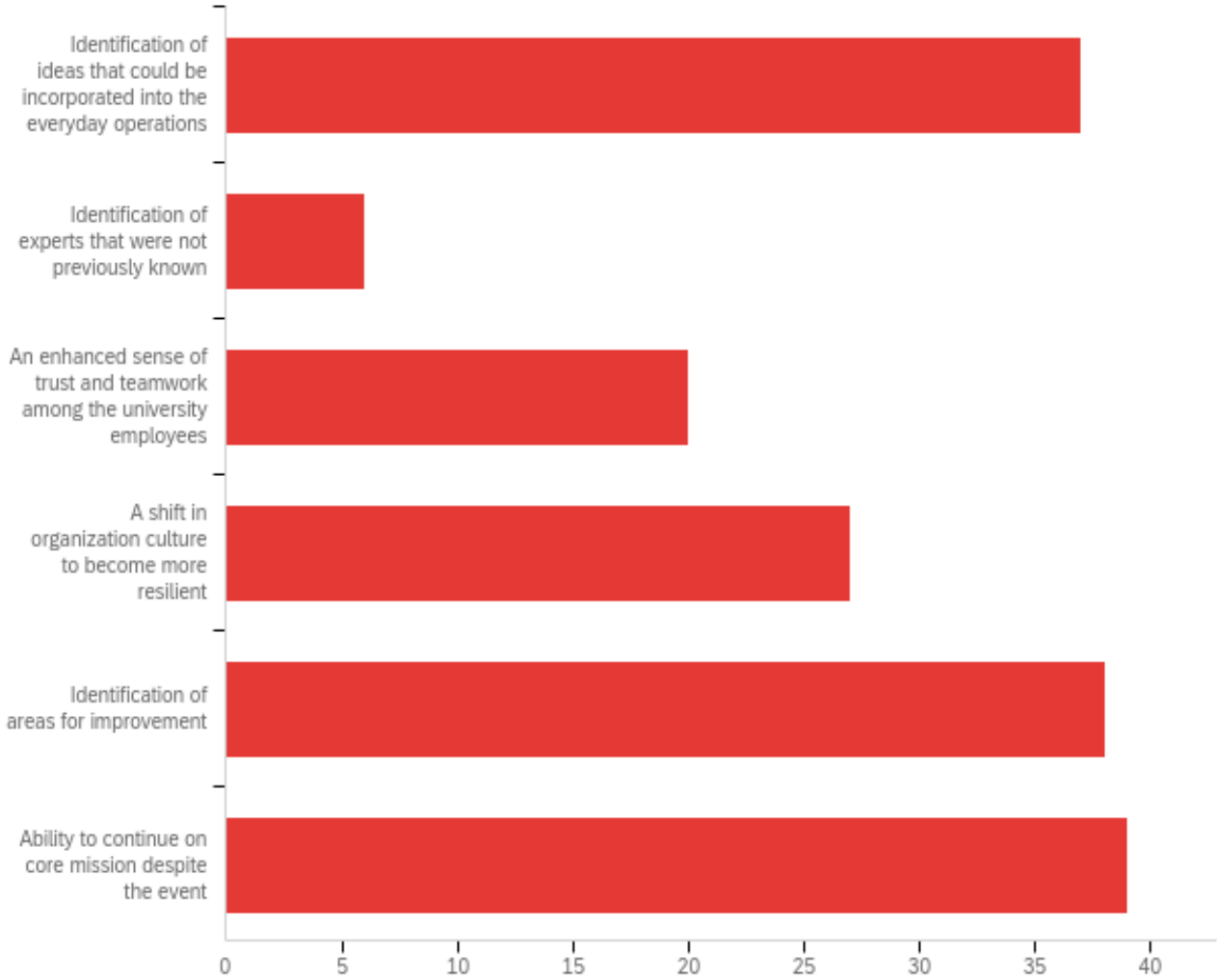
#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	An overall Response Vision was agreed to and incorporated into the crisis response	1.00	4.00	2.30	0.97	0.94	66
2	Experts were identified and utilized	1.00	4.00	2.26	1.09	1.19	66

3	School values were reflected in the effort	1.00	4.00	1.77	0.95	0.90	66
4	Response organizational structure (roles and responsibilities) was clear	1.00	4.00	2.32	1.08	1.16	66
5	Information was timely and was shared appropriately	1.00	4.00	2.08	1.09	1.19	66
6	Emotional aspects were included and addressed	1.00	4.00	2.45	1.18	1.40	66
7	There was a sense of trust on others embedded within the effort	1.00	4.00	2.29	1.12	1.27	66
8	There was adequate pre-work to prepare for the event	1.00	4.00	2.61	1.09	1.18	66
9	Unforeseen items were handled adequately by the response team	1.00	4.00	2.24	0.99	0.97	66
10	The university was able to return to a close-to-normal status given the ongoing situation	1.00	4.00	2.27	0.95	0.90	66
11	Lessons learned were incorporated back into the process	1.00	4.00	2.21	1.05	1.11	66

#	Question	Fully		Covered (but with small gaps)		Covered (but with large gaps)		Not Covered		Total
1	An overall Response Vision was agreed to and incorporated into the crisis response	22.73%	15	37.88%	25	25.76%	17	13.64%	9	66
2	Experts were identified and utilized	31.82%	21	28.79%	19	21.21%	14	18.18%	12	66
3	School values were reflected in the effort	53.03%	35	22.73%	15	18.18%	12	6.06%	4	66
4	Response organizational structure (roles and responsibilities) was clear	30.30%	20	24.24%	16	28.79%	19	16.67%	11	66

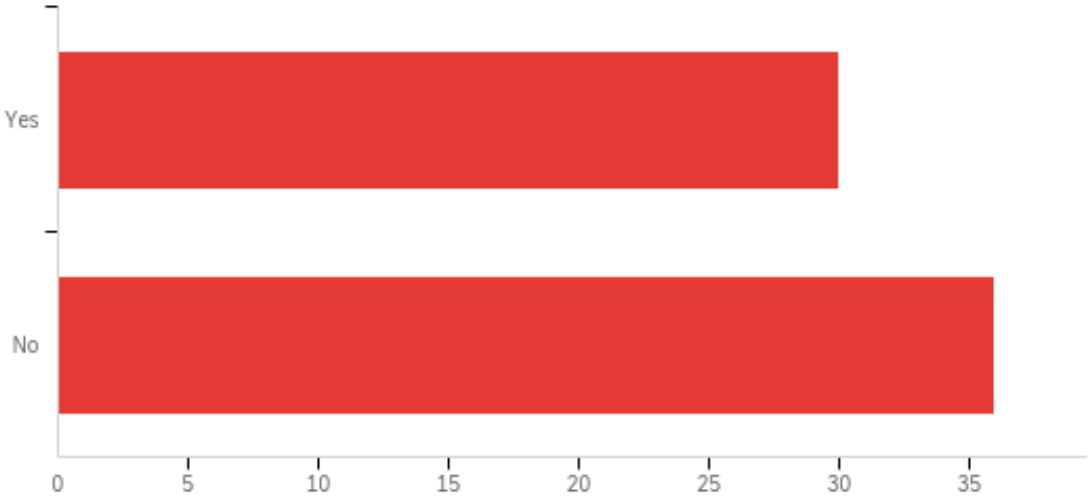
5	Information was timely and was shared appropriately	42.42%	28	21.21%	14	22.73%	15	13.64%	9	66
6	Emotional aspects were included and addressed	30.30%	20	21.21%	14	21.21%	14	27.27%	18	66
7	There was a sense of trust on others embedded within the effort	33.33%	22	24.24%	16	22.73%	15	19.70%	13	66
8	There was adequate pre-work to prepare for the event	19.70%	13	27.27%	18	25.76%	17	27.27%	18	66
9	Unforeseen items were handled adequately by the response team	25.76%	17	37.88%	25	22.73%	15	13.64%	9	66
10	The university was able to return to a close-to-normal status given the ongoing situation	25.76%	17	30.30%	20	34.85%	23	9.09%	6	66
11	Lessons learned were incorporated back into the process	33.33%	22	25.76%	17	27.27%	18	13.64%	9	66

F8 - What areas, if any, do you feel were positives coming out of this crisis management effort? (check all that apply)



#	Answer	%	Count
3	Identification of ideas that could be incorporated into the everyday operations	22.16%	37
4	Identification of experts that were not previously known	3.59%	6
5	An enhanced sense of trust and teamwork among the university employees	11.98%	20
7	A shift in organization culture to become more resilient	16.17%	27
8	Identification of areas for improvement	22.75%	38
9	Ability to continue on core mission despite the event	23.35%	39
	Total	100%	167

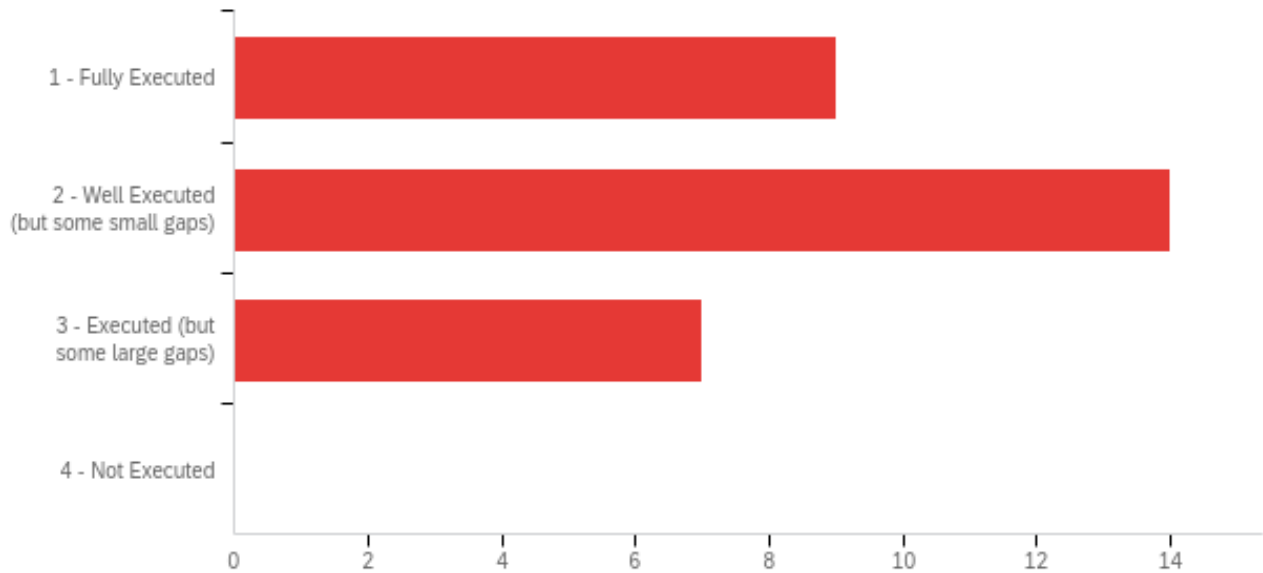
F9 - Do you feel that that Missouri State had a formal crisis management plan in place when the Pandemic occurred?



#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Do you feel that that Missouri State had a formal crisis management plan in place when the Pandemic occurred?	24.00	25.00	24.55	0.50	0.25	66

#	Answer	%	Count
24	Yes	45.45%	30
25	No	54.55%	36
	Total	100%	66

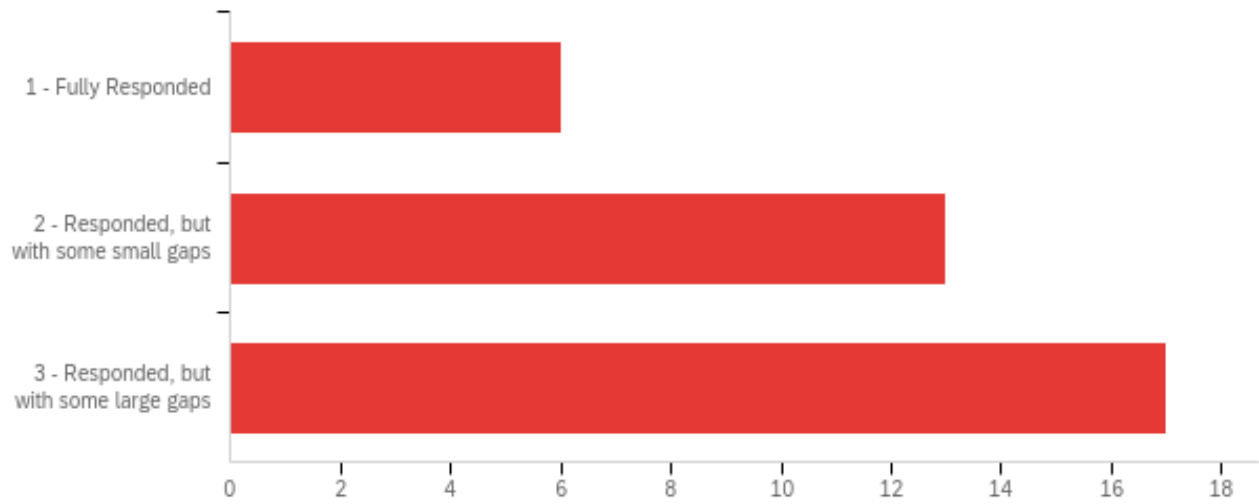
F10A - How well do you feel the crisis management plan was executed?



#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	How well do you feel the crisis management plan was executed?	1.00	3.00	1.93	0.73	0.53	30

#	Answer	%	Count
1	1 - Fully Executed	30.00%	9
2	2 - Well Executed (but some small gaps)	46.67%	14
3	3 - Executed (but some large gaps)	23.33%	7
4	4 - Not Executed	0.00%	0
	Total	100%	30

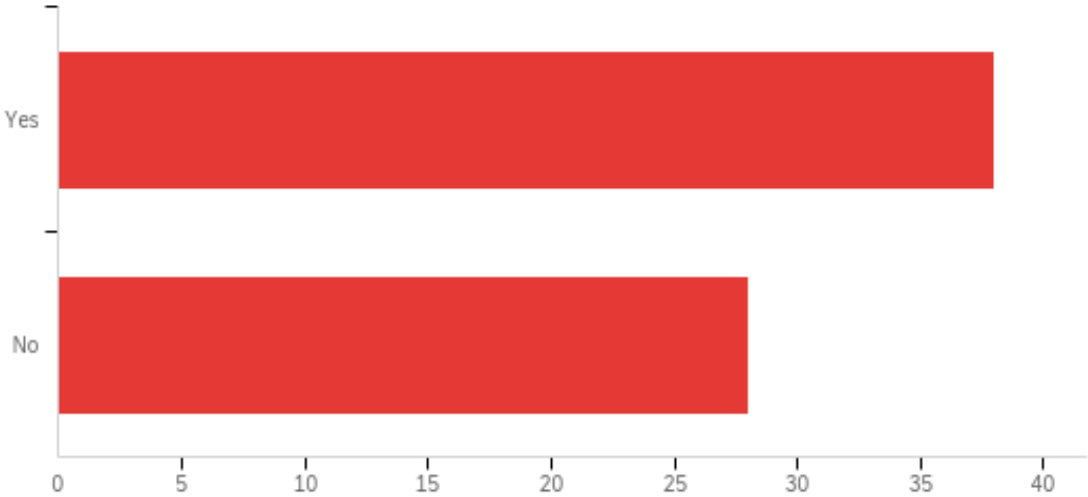
F10B - How well do you feel Missouri State responded to the Pandemic in light of having no crisis management plan?



#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	How well do you feel Missouri State responded to the Pandemic in light of having no crisis management plan?	1.00	3.00	2.31	0.74	0.55	36

#	Answer	%	Count
1	1 - Fully Responded	16.67%	6
2	2 - Responded, but with some small gaps	36.11%	13
3	3 - Responded, but with some large gaps	47.22%	17
	Total	100%	36

F10 - Do you feel there was adequate communication from the administration and crisis team to you during the event?



#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Do you feel there was adequate communication from the administration and crisis team to you during the event?	1.00	2.00	1.42	0.49	0.24	66

#	Answer	%	Count
1	Yes	57.58%	38
2	No	42.42%	28
	Total	100%	66

F11 - Can you give more insight on what you felt was missing?

Can you give more insight on what you felt was missing?

Notification of exposure in face-to-face classes

I didn't feel like I was receiving full and transparent information about how we would make changes to course scheduling to maintain safety for our students. The university hired a GA to handle all the tracing needed, instead of a full time employee with a background in this area or any real accountability past this role and short time frame.

There was a lot of communication that decision-making processes were happening, but the communication about actual decisions was less clear. There were also several times we (as faculty) were asked to gather information quickly/far in advance, but then nothing seemed to have ever been done with the information.

The university has been exceedingly reluctant to implement necessary safety protocols (Clif actively resisted masking, for example). Leadership on key issues was poor--Clif began a Covid townhall by announcing that he needed to end on time to go to a family gathering in another state--a terrible example. Decisions were left until very late in the process, putting faculty in extremely difficult positions. The administration provided almost no support for faculty and staff who have caregiver responsibilities (not a surprise given the university's lack of support for parents/caregivers overall). And they still seem to think they can proceed with business as usual in the spring (albeit with a few more online classes)--we're told that practicums and field experiences will be "as normal." When faculty have asked for help, the administration buying into business-model gimmicks (eg "LinkedIn Learning") that are not appropriate for higher education. I've had to rely on resources outside the university for course development/communication/pedagogical strategies. The FCTL has been slow to adapt--last spring and summer, they were still pushing Mediasite without explaining to faculty that there was no captioning available.

Over the summer it wasn't clear what faculty were going to be allowed to do. Then it appeared we were asked to teach in person, and at the last minute, we were given more options (but after students had registered and plans were made). Also, testing should have been part of a reopening plan in August (I mean each person tested) and this might have prevented the spike.

Faculty were not given the opportunity of giving input. Information about the university plans were always made last minute. A rationale for the decisions made by the administration was not always provided

Sometimes there could have been earlier communications because it felt that decisions had already been made but upper management were just looking for the "right time" to release those decisions.

The administration waited too long to make decisions. There was no mask mandate until after Springfield passed one. There wasn't much official response to the outbreak at the beginning of Fall semester, other than blaming students. They took too much of a wait and see approach. I still don't think they realize or admit the negative effects the student outbreak has had on the surrounding community.

Seemed like a real lack of communication in the first few weeks. Things have been fine since, especially given how low our numbers have been. But I was surprised to see so few updates the first couple of weeks in the fall semester.

Information was not made available in a timely fashion. Key pieces of information - how many students can be in various classrooms, for example - was not shared with enough time for faculty to

adapt well. Decisions were made at the last possible moment and the onus was put onto faculty and staff to dedicate themselves to figuring everything out in a short period of time.

We were not contacted or informed by anyone coming into the Fall semester. In my opinion, given that many top universities in the country recognized that it was not safe to come back to campus, we should have followed their lead. I did not feel safe coming back to campus but felt that there was no choice but to do so. There was little guidance from management and long wait times between communications to employees. I felt that it was my responsibility to make safety choices for my students, however, I am not an infectious disease expert and should not be put in a position to figure those things out myself.

Inadequate mental health facilities, inadequate cleaning regimen, inadequate quarantining facilities, inadequate computer accessibility, inadequate zoom room capabilities, inadequate accessibility, inadequate instructions for professors regarding inequitable policies, ill informed online/hybrid/in-person determinations

Faculty would offer suggestions, but they went into a giant black hole. We had no idea what was going on during the summer....do we plan for classes as normal? Do we plan for fully online classes? Something in between? You can't just tell faculty 2 days before the semester starts, 'ok we've changed our mind, we want you to do you class like thus-and-so'. Personally, I didn't feel like MSU cared about our concerns vis-a-vis our health. All they cared about was, 'How do we get as much money out of students as possible?'. All summer long it felt like upper admin was just sitting in a corner rubbing a rabbit's foot hoping that the problem would magically go away.

XX

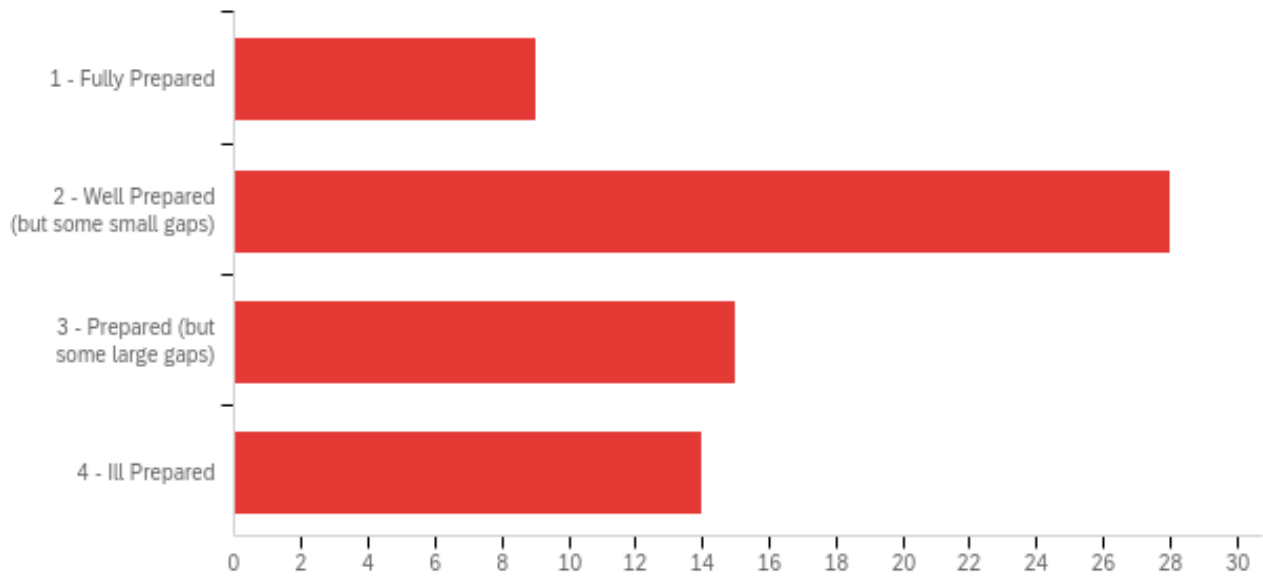
No follow-up about students who the university had COVID 19 or were exposed. And were missing class or being tested. Never once heard from the Response Team. Non-existence. Not even sure what there roll was in connect with faculty, staff and STUDENTS.

Expectations of faculty and staff were not formalized. Even days within the start we were unclear of the required set up. During the event there was disconnect between covid response and faculty as to expectations and needs. No emails or communications with updates and expectations if outbreak occurs.

The president of the university kept us more informed with his meetings on zoom with us than the administration of the college.

No consultation with faculty; decisions were top-down

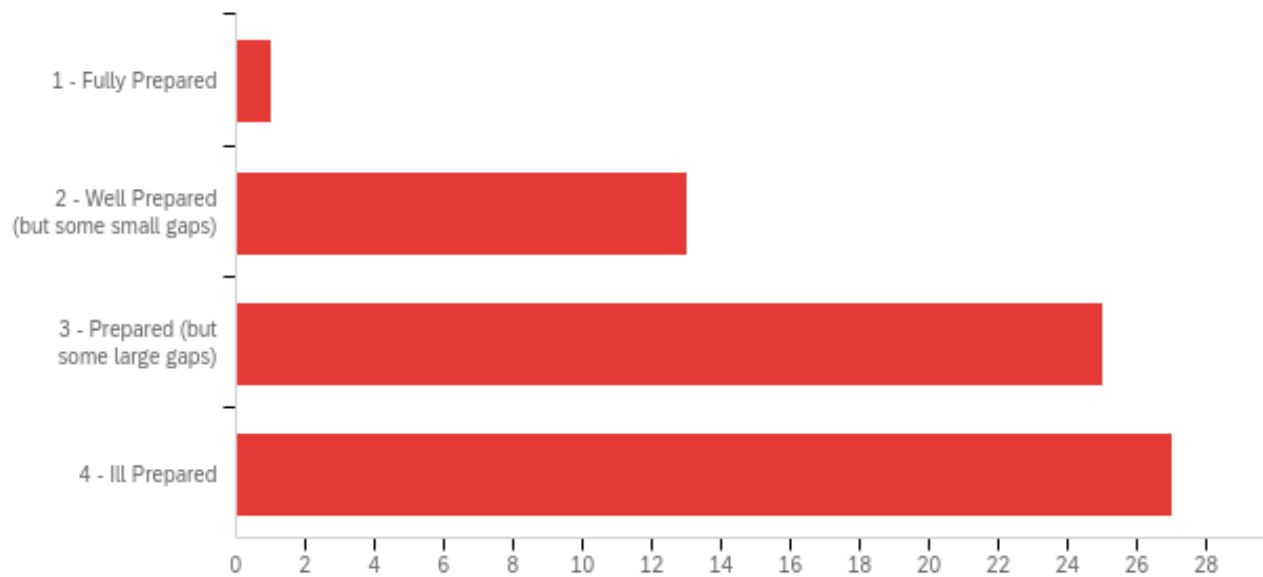
F12 - With regards to the administration of the University, rate their level of readiness for the Pandemic event



#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	With regards to the administration of the University, rate their level of readiness for the Pandemic event	1.00	4.00	2.52	0.97	0.95	66

#	Answer	%	Count
1	1 - Fully Prepared	13.64%	9
2	2 - Well Prepared (but some small gaps)	42.42%	28
3	3 - Prepared (but some large gaps)	22.73%	15
4	4 - Ill Prepared	21.21%	14
	Total	100%	66

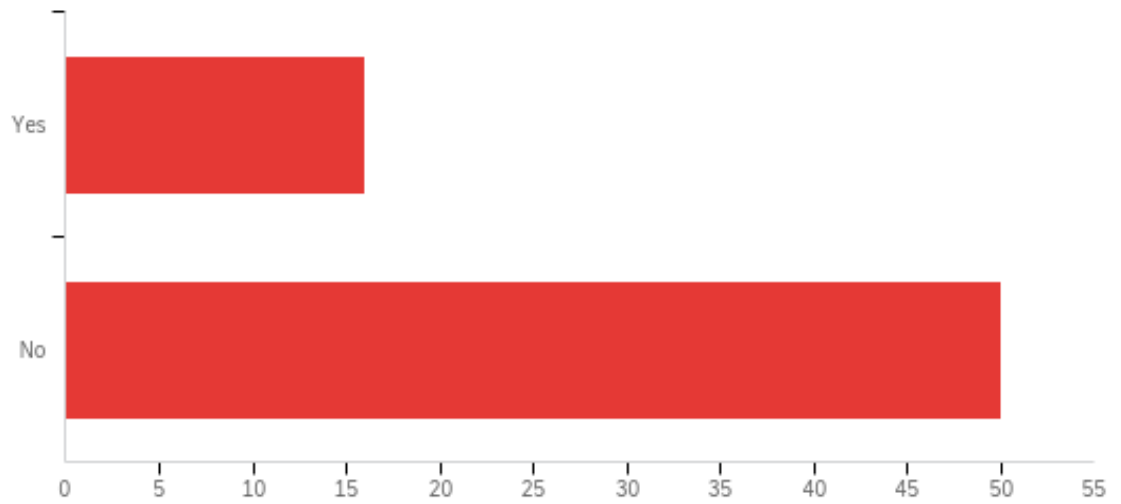
F13 - With regards to the students of the University, rate their level of readiness for the Pandemic event



#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	With regards to the students of the University, rate their level of readiness for the Pandemic event	1.00	4.00	3.18	0.80	0.63	66

#	Answer	%	Count
1	1 - Fully Prepared	1.52%	1
2	2 - Well Prepared (but some small gaps)	19.70%	13
3	3 - Prepared (but some large gaps)	37.88%	25
4	4 - Ill Prepared	40.91%	27
	Total	100%	66

F14 - Would you be willing to participate in a 15-30 minute follow-up interview related to your answers on this survey?



#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Would you be willing to participate in a 15-30 minute follow-up interview related to your answers on this survey?	23.00	24.00	23.76	0.43	0.18	66

#	Answer	%	Count
23	Yes	24.24%	16
24	No	75.76%	50
	Total	100%	66

F15 - Please enter your email address so that we may contact you in the future regarding an interview. Thank you!

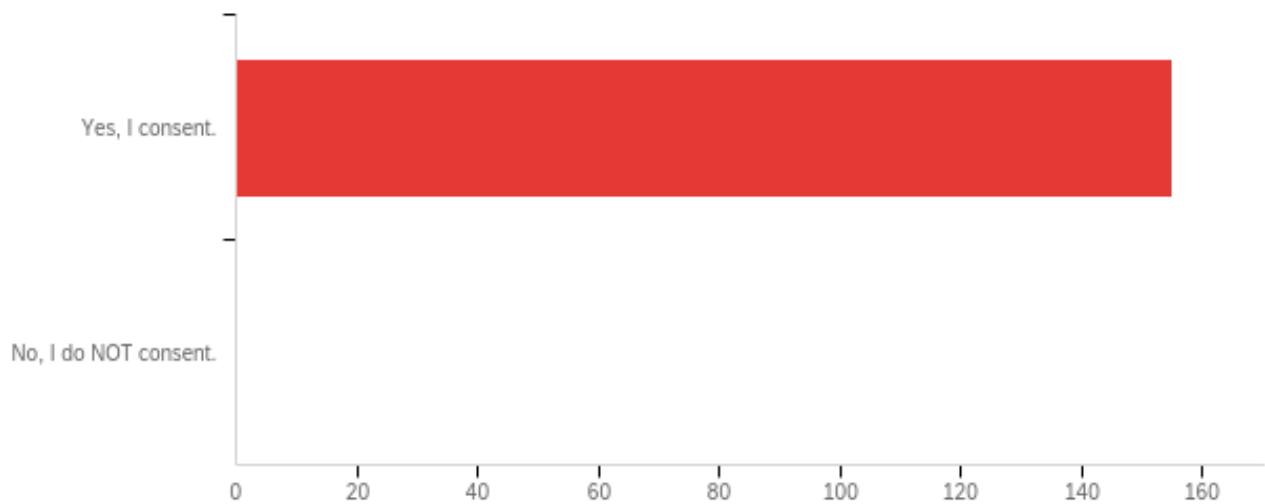
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Staff Survey Results

Default Report

Missouri State Crisis Management / Staff

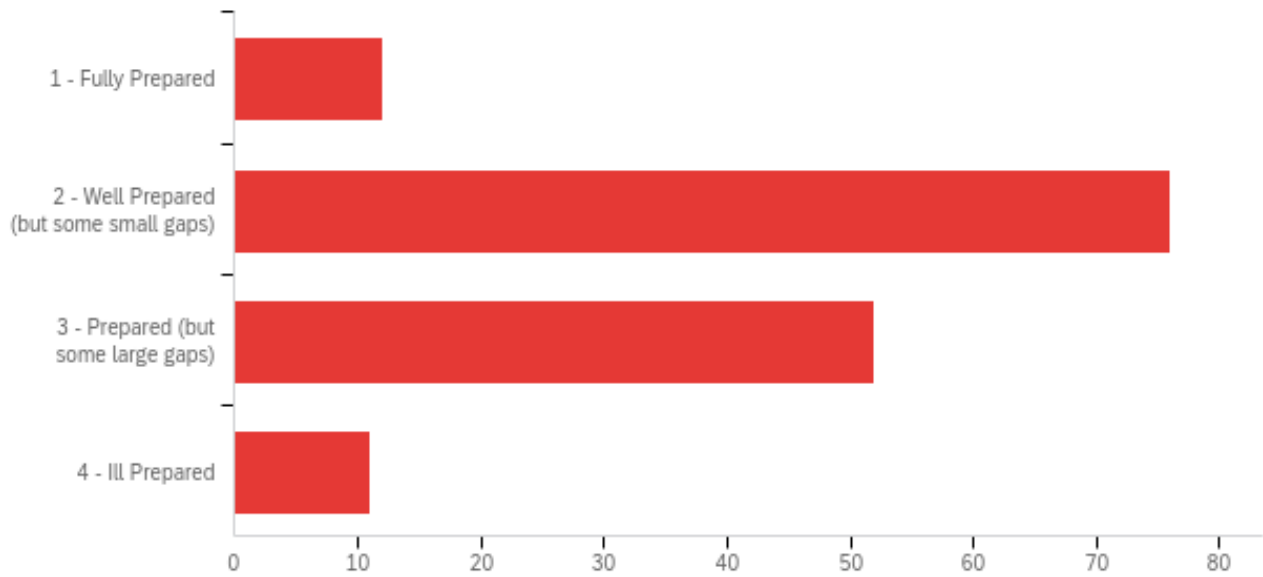
Q1 - These questions will help garner information related to Missouri State University's planning and response to the COVID-19 Pandemic event. This information is being collected as part of a Capstone Project for doctoral candidate, David Capps, who is seeking an Ed.D from Vanderbilt University. David obtained his B.S. and M.S. degrees in Computer Information Systems from Missouri State, and cares very deeply about his alma mater. He is hoping to utilize the information from this research, along with his expertise in disaster recovery and risk management to create recommendations that will help mature Missouri State's resilience practices. David lives in New York and is currently a leader in Risk Management for the Federal Reserve Bank of New York. He also has experience working in higher education at Fordham University, and will look to draw upon his past experience in crafting appropriate and sustainable solutions. The information that is being collected will be kept confidential. Please check the box below if you consent to proceeding with this survey.



#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	These questions will help garner information related to Missouri State University's planning and response to the COVID-19 Pandemic event. This information is being collected as part of a Capstone Project for doctoral candidate, David Capps, who is seeking an Ed.D from Vanderbilt University. David obtained his B.S. and M.S. degrees in Computer Information Systems from Missouri State, and cares very deeply about his alma mater. He is is hoping to utilize the information from this research, along with his expertise in disaster recovery and risk management to create recommendations that will help mature Missouri State's resilience practices. David lives in New York and is currently a leader in Risk Management for the Federal Reserve Bank of New York. He also has experience working in higher education at Fordham University, and will look to draw upon his past experience in crafting appropriate and sustainable solutions. The information that is being collected will be kept confidential. Please check the box below if you consent to proceeding with this survey.	1.00	1.00	1.00	0.00	0.00	155

#	Answer	%	Count
1	Yes, I consent.	100.00%	155
2	No, I do NOT consent.	0.00%	0
	Total	100%	155

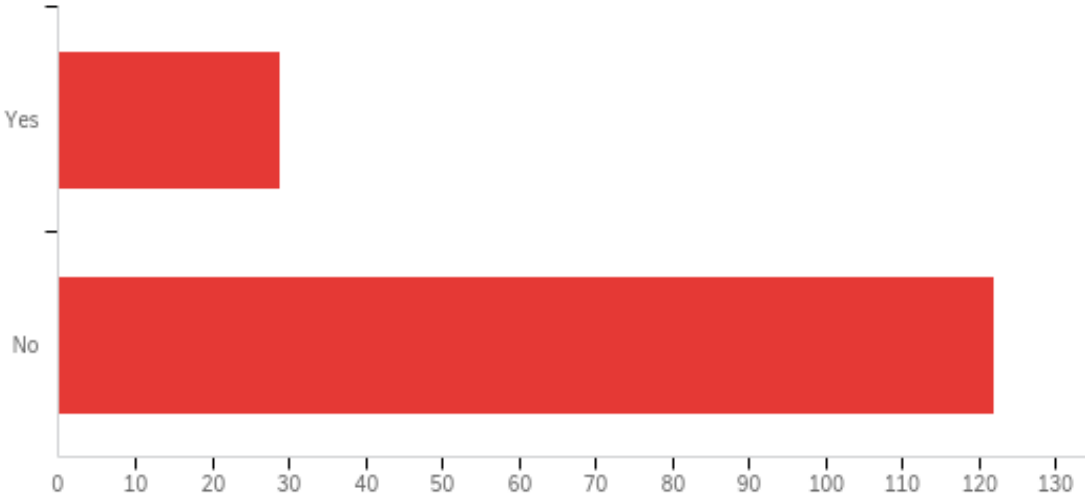
S1 - How well do you feel Missouri State overall was prepared for the Pandemic event?



#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	How well do you feel Missouri State overall was prepared for the Pandemic event?	1.00	4.00	2.41	0.74	0.55	151

#	Answer	%	Count
1	1 - Fully Prepared	7.95%	12
2	2 - Well Prepared (but some small gaps)	50.33%	76
3	3 - Prepared (but some large gaps)	34.44%	52
4	4 - Ill Prepared	7.28%	11
	Total	100%	151

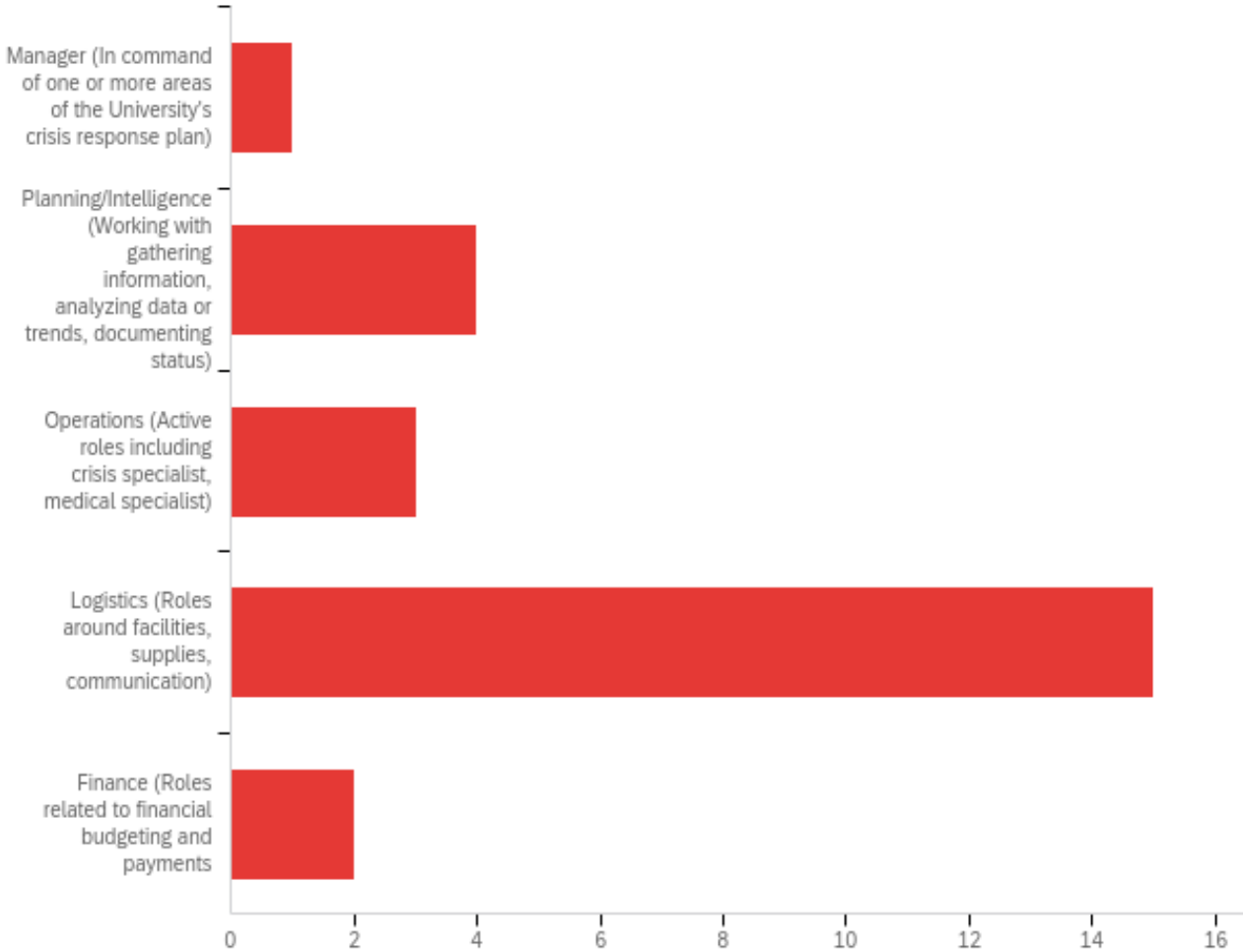
S2 - Were you involved in crisis management planning or enactment of a crisis management plan?



#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Were you involved in crisis management planning or enactment of a crisis management plan?	25.00	26.00	25.81	0.39	0.16	151

#	Answer	%	Count
25	Yes	19.21%	29
26	No	80.79%	122
	Total	100%	151

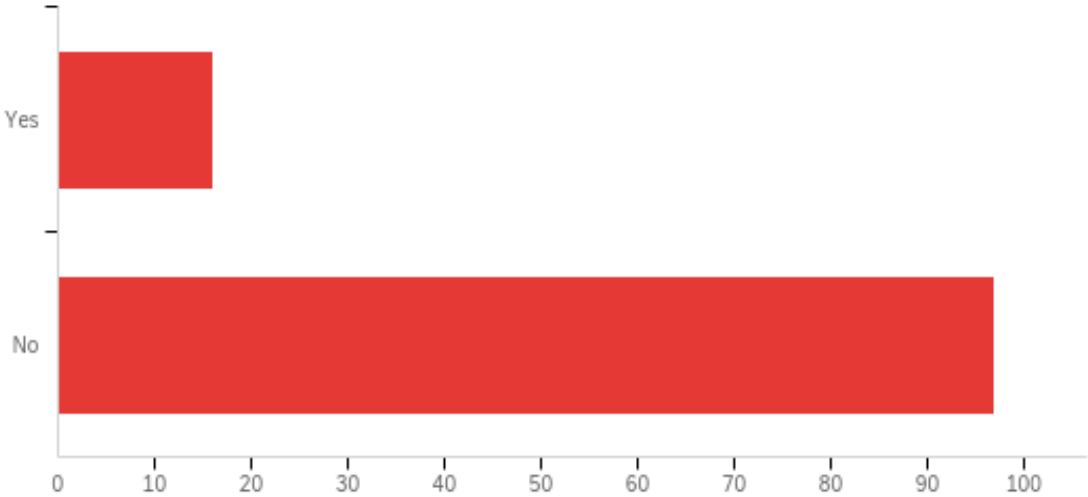
S3 - What general role did you make play in the University crisis response?(If no direct match, pick the one that is closest to the role you played)



#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	What general role did you make play in the University crisis response?(If no direct match, pick the one that is closest to the role you played)	4.00	8.00	6.52	0.98	0.97	25

#	Answer	%	Count
4	Manager (In command of one or more areas of the University's crisis response plan)	4.00%	1
5	Planning/Intelligence (Working with gathering information, analyzing data or trends, documenting status)	16.00%	4
6	Operations (Active roles including crisis specialist, medical specialist)	12.00%	3
7	Logistics (Roles around facilities, supplies, communication)	60.00%	15
8	Finance (Roles related to financial budgeting and payments)	8.00%	2
	Total	100%	25

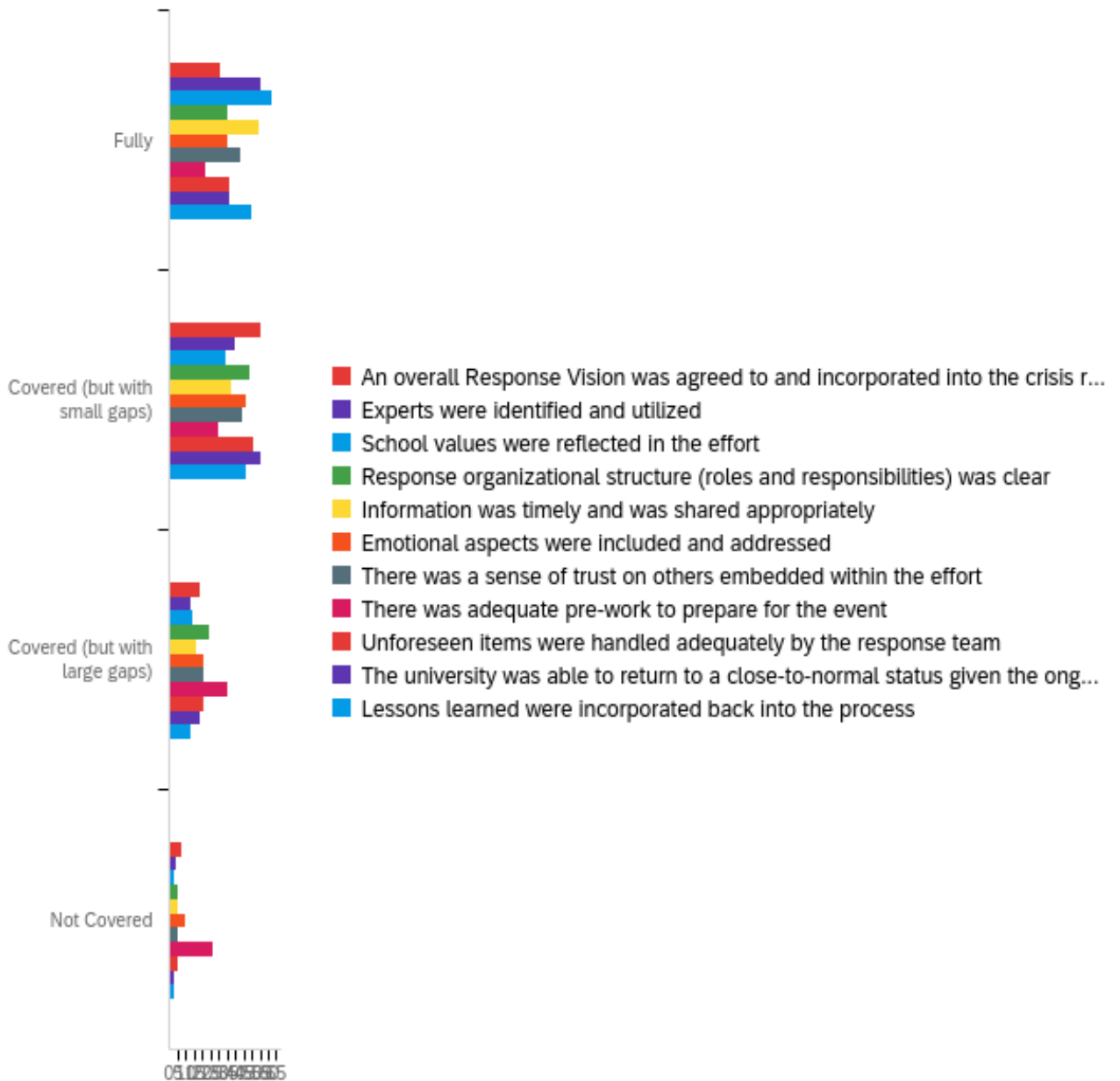
S4 - Was the University crisis response ever practiced or tested at a University-wide level prior to the Pandemic?



#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Was the University crisis response ever practiced or tested at a University-wide level prior to the Pandemic?	23.00	24.00	23.86	0.35	0.12	113

#	Answer	%	Count
23	Yes	14.16%	16
24	No	85.84%	97
	Total	100%	113

S5 - How well do you think the following areas were covered in relation to the school's crisis management efforts?



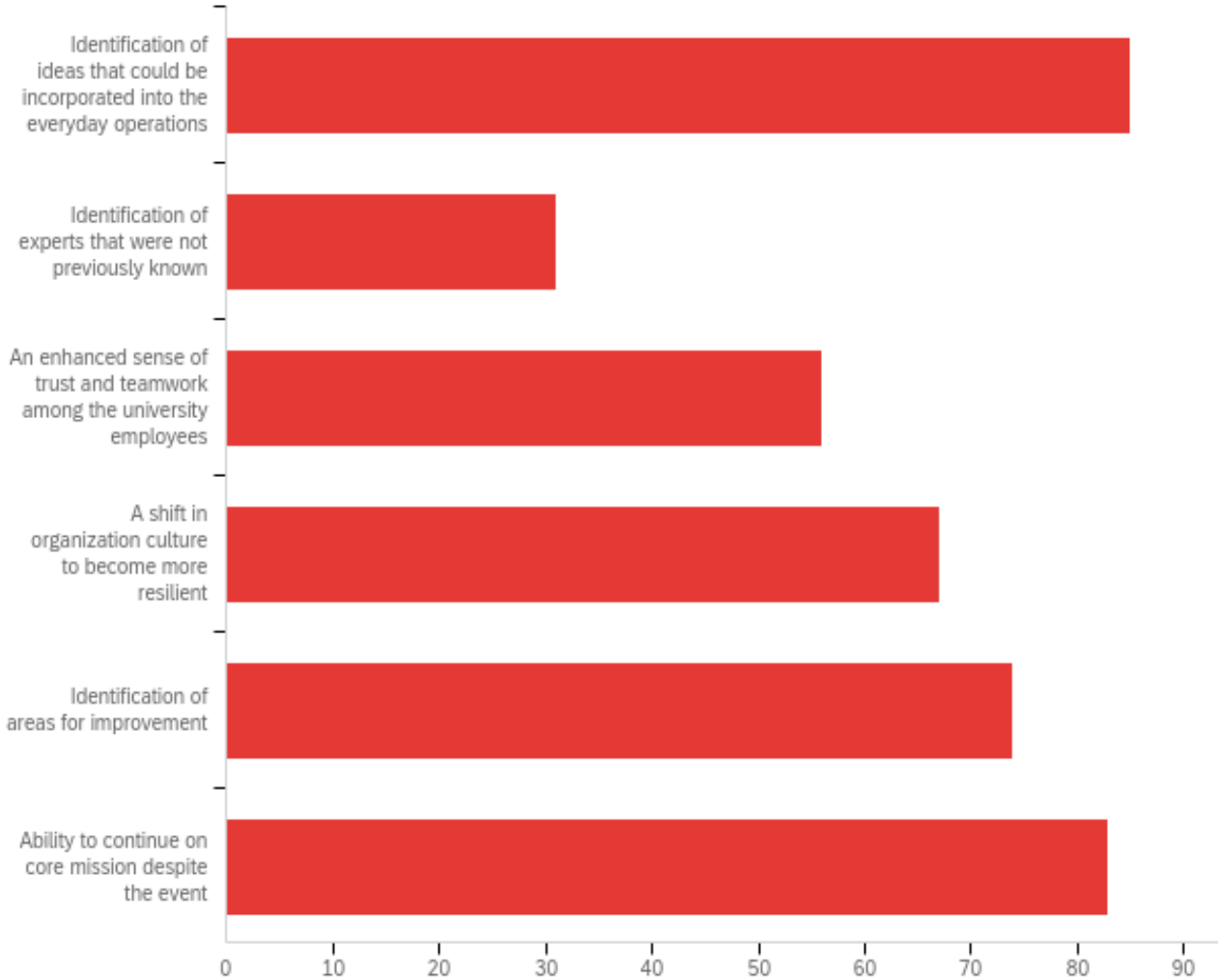
#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	An overall Response Vision was agreed to and incorporated into the crisis response	1.00	4.00	2.02	0.83	0.69	113
2	Experts were identified and utilized	1.00	4.00	1.69	0.81	0.66	113

3	School values were reflected in the effort	1.00	4.00	1.63	0.80	0.64	113
4	Response organizational structure (roles and responsibilities) was clear	1.00	4.00	1.99	0.84	0.70	113
5	Information was timely and was shared appropriately	1.00	4.00	1.75	0.86	0.74	113
6	Emotional aspects were included and addressed	1.00	4.00	2.05	0.92	0.85	113
7	There was a sense of trust on others embedded within the effort	1.00	4.00	1.89	0.86	0.73	113
8	There was adequate pre-work to prepare for the event	1.00	4.00	2.58	1.05	1.09	113
9	Unforeseen items were handled adequately by the response team	1.00	4.00	1.96	0.82	0.68	113
10	The university was able to return to a close-to-normal status given the ongoing situation	1.00	4.00	1.90	0.76	0.58	113
11	Lessons learned were incorporated back into the process	1.00	4.00	1.73	0.77	0.59	113

#	Question	Fully		Covered (but with small gaps)		Covered (but with large gaps)		Not Covered		Total
1	An overall Response Vision was agreed to and incorporated into the crisis response	27.43%	31	49.56%	56	16.81%	19	6.19%	7	113
2	Experts were identified and utilized	49.56%	56	35.40%	40	11.50%	13	3.54%	4	113
3	School values were reflected in the effort	54.87%	62	30.09%	34	12.39%	14	2.65%	3	113
4	Response organizational structure (roles and responsibilities) was clear	30.97%	35	43.36%	49	21.24%	24	4.42%	5	113

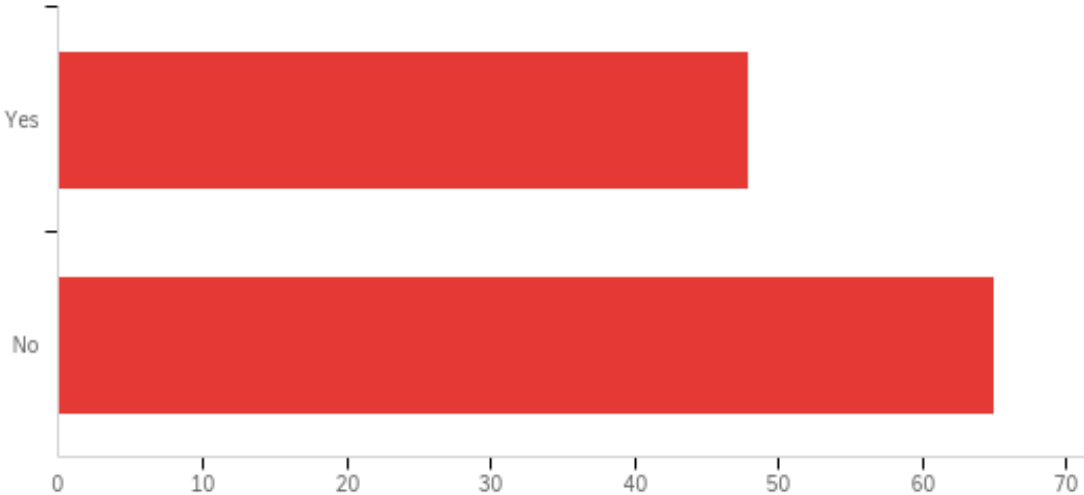
5	Information was timely and was shared appropriately	47.79%	54	33.63%	38	14.16%	16	4.42%	5	113
6	Emotional aspects were included and addressed	30.97%	35	41.59%	47	18.58%	21	8.85%	10	113
7	There was a sense of trust on others embedded within the effort	38.05%	43	38.94%	44	18.58%	21	4.42%	5	113
8	There was adequate pre-work to prepare for the event	19.47%	22	26.55%	30	30.97%	35	23.01%	26	113
9	Unforeseen items were handled adequately by the response team	31.86%	36	45.13%	51	18.58%	21	4.42%	5	113
10	The university was able to return to a close-to-normal status given the ongoing situation	31.86%	36	48.67%	55	16.81%	19	2.65%	3	113
11	Lessons learned were incorporated back into the process	44.25%	50	41.59%	47	11.50%	13	2.65%	3	113

S6 - What areas, if any, do you feel were positives coming out of this crisis management effort? (check all that apply)



#	Answer	%	Count
3	Identification of ideas that could be incorporated into the everyday operations	21.46%	85
4	Identification of experts that were not previously known	7.83%	31
5	An enhanced sense of trust and teamwork among the university employees	14.14%	56
7	A shift in organization culture to become more resilient	16.92%	67
8	Identification of areas for improvement	18.69%	74
9	Ability to continue on core mission despite the event	20.96%	83
	Total	100%	396

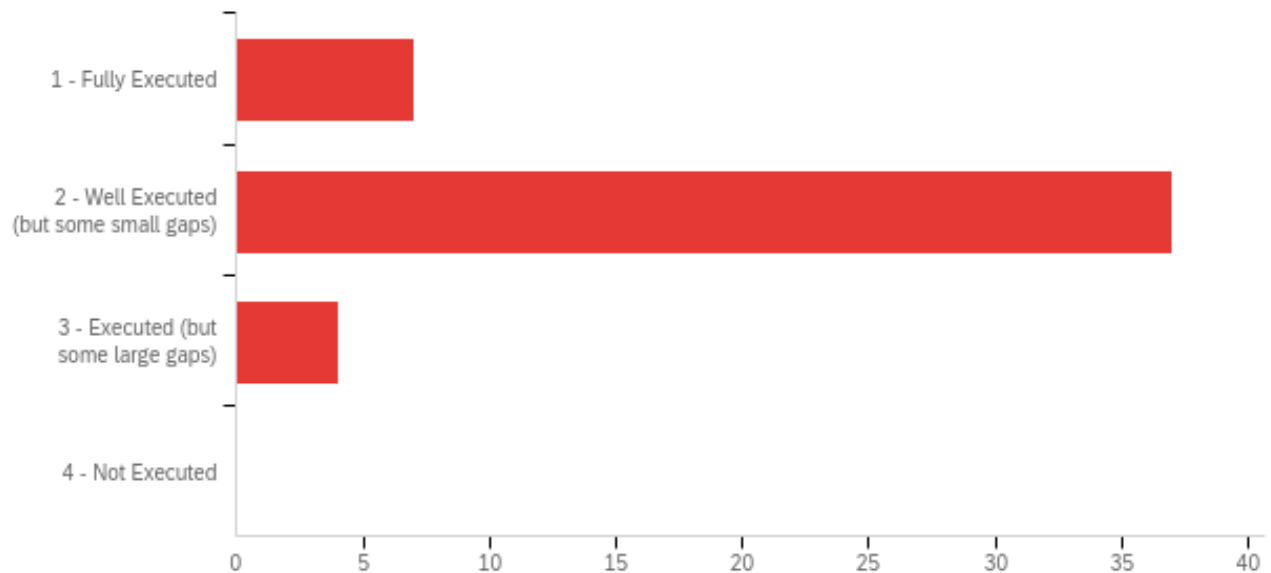
S7 - Do you feel that that Missouri State had a formal crisis management plan in place when the Pandemic occurred?



#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Do you feel that that Missouri State had a formal crisis management plan in place when the Pandemic occurred?	24.00	25.00	24.58	0.49	0.24	113

#	Answer	%	Count
24	Yes	42.48%	48
25	No	57.52%	65
	Total	100%	113

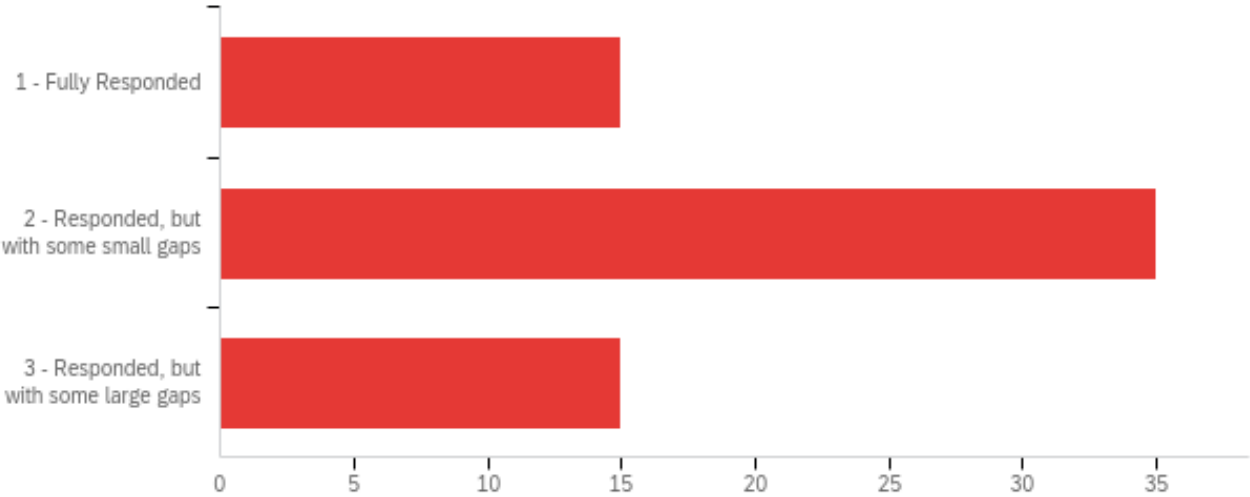
S8 - How well do you feel the crisis management plan was executed?



#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	How well do you feel the crisis management plan was executed?	1.00	3.00	1.94	0.47	0.23	48

#	Answer	%	Count
1	1 - Fully Executed	14.58%	7
2	2 - Well Executed (but some small gaps)	77.08%	37
3	3 - Executed (but some large gaps)	8.33%	4
4	4 - Not Executed	0.00%	0
	Total	100%	48

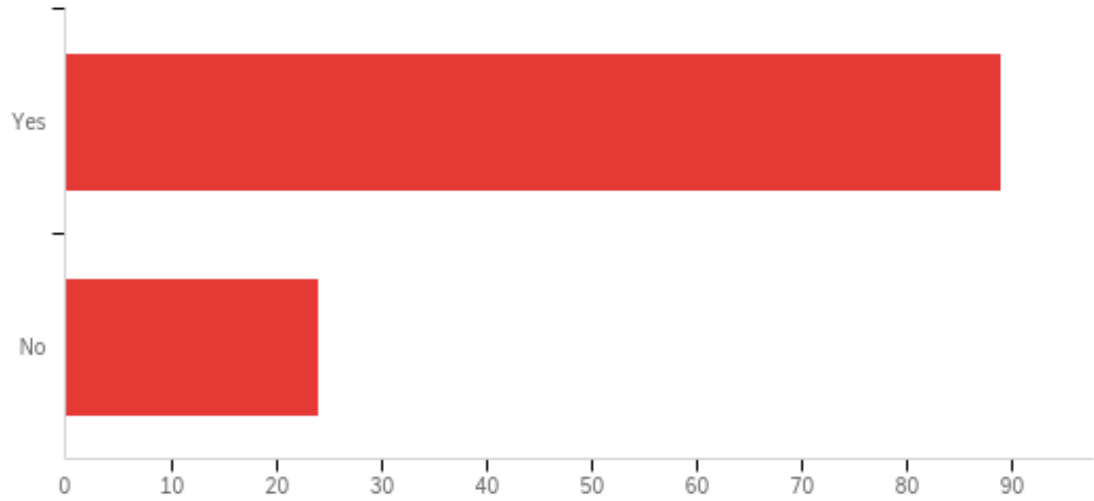
S9 - How well do you feel Missouri State responded to the Pandemic in light of having no crisis management plan?



#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	How well do you feel Missouri State responded to the Pandemic in light of having no crisis management plan?	1.00	3.00	2.00	0.68	0.46	65

#	Answer	%	Count
1	1 - Fully Responded	23.08%	15
2	2 - Responded, but with some small gaps	53.85%	35
3	3 - Responded, but with some large gaps	23.08%	15
	Total	100%	65

S10 - Do you feel there was adequate communication from the administration and crisis team to the faculty, staff, and students during the event?



#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Do you feel there was adequate communication from the administration and crisis team to the faculty, staff, and students during the event?	1.00	2.00	1.21	0.41	0.17	113

#	Answer	%	Count
1	Yes	78.76%	89
2	No	21.24%	24
	Total	100%	113

S11 - Can you give more insight on what you felt was missing?

Can you give more insight on what you felt was missing?

More so early on, employees felt fully in the dark and that administration was unconcerned with safety. Colleges were left to either wait indefinitely for clearer instructions, or to make (sometimes poor) decisions on their own, such as misinterpreting directives and putting employees on 2/3 pay who were fully capable of working from home (and in fact already were). The president's comments during town halls were also concerning, most notably when he was visibly angered and told employees to stop "living in fear." I have personally lost most trust in our administration after this event, though I do hope I'll find it again.

Decisions about where the university was headed and what would happen to the students, were being made by upper administration, which was then not conveyed to the university at large in a timely manner. Also, more specialized groups of students that might have needed more support than other students, were not given the resources they needed.

As an administrator for a department, we were essentially left to our own devices to implement a risk mitigation plan. Luckily the rest of the world had done so already so with a quick google search we had some guidelines and outlines to base our decisions

Students did not follow all guidelines. Faculty were not sure of what guidelines to follow. It seems like the university left a lot to the Deans and Department Heads.

The University adopted a practice of blasting notifications out to the general campus community or greater Springfield community prior to notifying key stakeholders within the University. Many of us felt that we found out information at the same time as the community, which left us without any time to adequately prepare. We felt as though we were scrambling and furthering the pandemic chaos. Furthermore, communication has since vanished as though the pandemic has ceased and normal operations may proceed. In fact, staff are being encouraged to come back to campus even though the United States continues to set infection and hospitalization records.

Communication.

There were unrealistically high expectations placed on us in terms of what we were to do, no checking in to see if those expectations were manageable, and no concern for the health/mental health of employees/family. There was no trust in the integrity of employees to use time wisely - overreach was significant in terms of micromanaging staff.

I thought more communication was needed. Sometimes, the information was too late.

Much of the information released was done on a last minute basis prior to March, 2020. Of course, the situation was changing rapidly, but, at least in my department, we were not aware of any communications until the time immediately before they were incorporated.

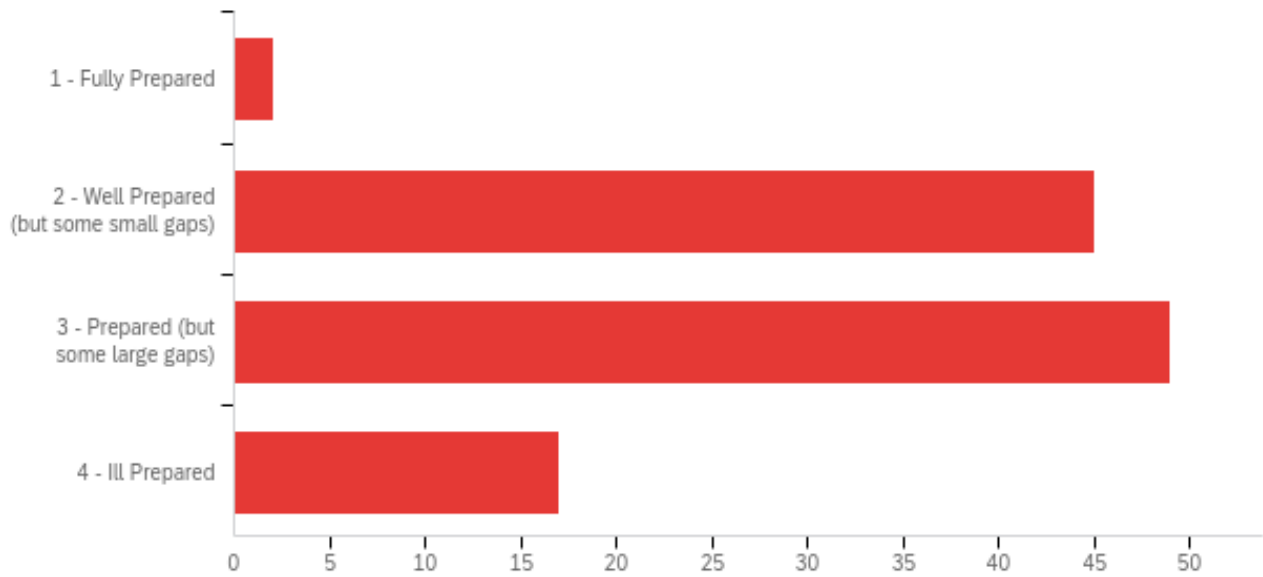
Most of the communication in my specific area was provided through news and media outlets, before coming from the University itself. Employees felt a lack of importance, as we had to find things out when the rest of the city found out. Some of which were major impacts to individual employees. Sometimes, information was shared with one department, but not others, and the news would start spreading like rumors. No one actually knew what was accurate information or not.

Employees were told at the same time as students. We also had no idea and no time to tell students or prep.

Communication during the pandemic. Compassion from the administration towards concerned staff and faculty.

I felt like there could have been more information sent out on status of meetings, updates to regulations, and when decisions were going to happen. I appreciate that the President took all aspects into account before making large decisions. However, there were weeks that we heard nothing from the administration in regards to policy updates or just an encouraging email. During a time we were all stressing out and worrying how the fall semester was going to happen, just having this weekly confirmation that someone higher up in the chain was thinking about us would have been encouraging.

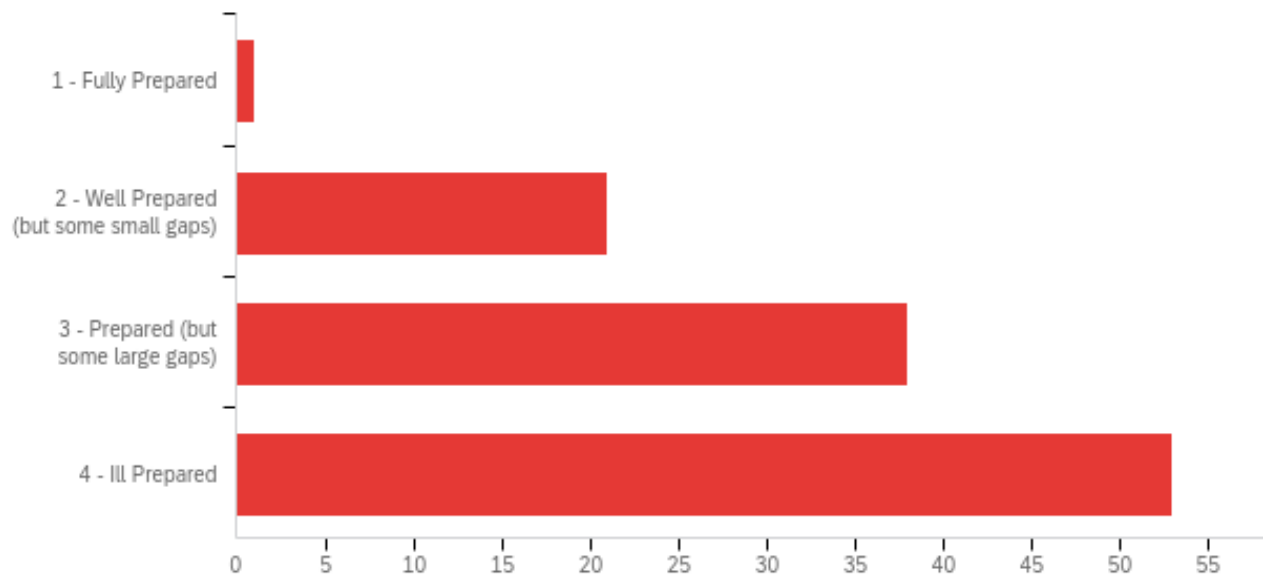
S12 - With regards to the faculty and administration of the University, rate their level of readiness for the Pandemic event



#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	With regards to the faculty and administration of the University, rate their level of readiness for the Pandemic event	1.00	4.00	2.72	0.73	0.54	113

#	Answer	%	Count
1	1 - Fully Prepared	1.77%	2
2	2 - Well Prepared (but some small gaps)	39.82%	45
3	3 - Prepared (but some large gaps)	43.36%	49
4	4 - Ill Prepared	15.04%	17
	Total	100%	113

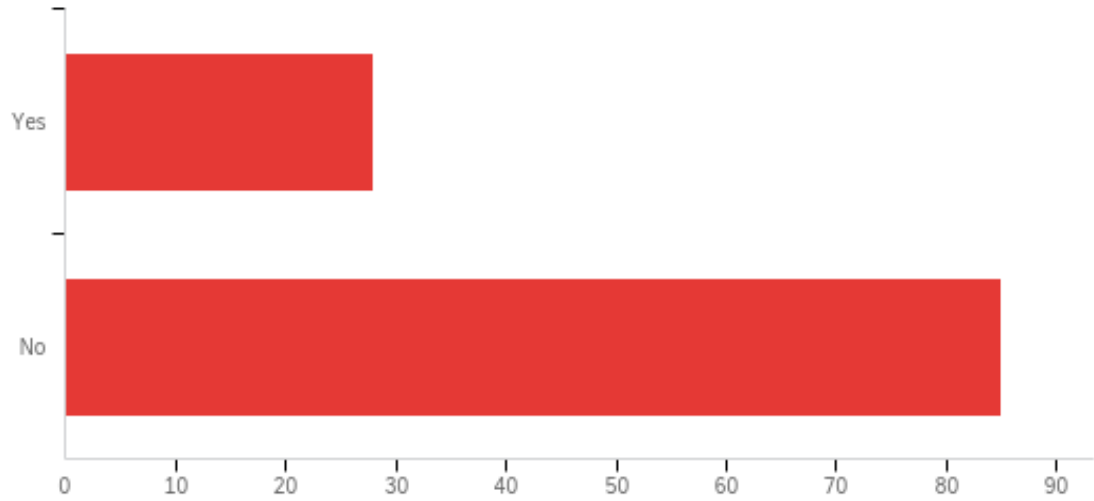
S13 - With regards to the students of the University, rate their level of readiness for the Pandemic event



#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	With regards to the students of the University, rate their level of readiness for the Pandemic event	1.00	4.00	3.27	0.79	0.62	113

#	Answer	%	Count
1	1 - Fully Prepared	0.88%	1
2	2 - Well Prepared (but some small gaps)	18.58%	21
3	3 - Prepared (but some large gaps)	33.63%	38
4	4 - Ill Prepared	46.90%	53
	Total	100%	113

S14 - Would you be willing to participate in a 15-30 minute follow-up interview related to your answers on this survey?



#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Would you be willing to participate in a 15-30 minute follow-up interview related to your answers on this survey?	23.00	24.00	23.75	0.43	0.19	113

#	Answer	%	Count
23	Yes	24.78%	28
24	No	75.22%	85
	Total	100%	113

S15 - Please enter your email address so that we may contact you in the future regarding an interview. Thank you!

Deleted to maintain confidentiality!