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HOW DOES GENDER IMPACT LEADER SENSEMAKING IN CRISIS?

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Table of Contents

<i>Abstract</i>	3
<i>Introduction</i>	4
<i>Literature Review</i>	8
Sensemaking	9
Figure 1: The Process of Sensemaking	10
Gender Identity	12
Table 1: Masculine vs Feminine Leadership (Esser et al., 2018).....	15
Crisis	19
Table 2: Major types of crises faced by leaders and organizations	19
<i>Research Design and Methodology</i>	24
Research Design	24
Data Collection	25
Figure 2: Online Survey Questions (based on the Bem Sex Role Inventory)	26
Table 3: Summary of Online Survey Responses (December 2020)	28
Figure 3: In-Depth Interview Questionnaire.....	28
Context and Cases	32
Data Analysis	34
Calculating the Androgyny or A-Score.....	34
Table 4: Androgyny Score Calculation by Case	34
Case Categorization using Grodal's Moves.....	38
Figure 4: Analysing qualitative data using the case categorization process.....	38

Table 5: Step by Step Theory development using Grodal’s Moves (2021)	40
Figure 5: Gender Role Identity and Sensemaking Orientation	53
Figure 6: Biological Sex/Seniority and Sensemaking Orientation	54
Findings	55
Construct Splitting: The four dimensions of crisis sensemaking.....	55
Figure 7: 4 Dimensions of Sensemaking in Crisis	56
Individual Orientation	56
Group Orientation.....	58
Preservation Orientation.....	59
Performance Orientation.....	61
Potential Contributions	62
Research Implications.....	62
Figure 8: Research Model – Relationship between Gender Role Identity and Sensemaking with Crisis as a Mediator	63
Managerial Implications.....	64
Limitations.....	67
Appendix 0: Reviewed articles by construct.....	70
Appendix I. Research Questions Evoked by the Pandemic	73
Appendix II: Crisis Workshop Details	76
Bibliography	81

Abstract

While most headlines covering the COVID-19 pandemic focused on the healthcare and humanitarian crises, some of the conversations also focused on political and corporate leadership effectiveness. Leaders like Jacinda Ardern and Angela Merkel became role models of compassionate yet effective leadership. Juxtaposed against the traditional male leaders, female leaders seem to be better at managing the crisis. Employee satisfaction surveys showed that female managers were rated more favourably than their male counterparts on supporting their employees during the pandemic, even at the firm level. Despite the documented preference for masculine leaders under crisis, is feminine leadership more effective? Our study examines this question with a sample of senior corporate leaders during the pandemic. The study's key finding is that gender role identity matters more than biological sex in how leaders make sense during and after a crisis. It also shows how leaders of different gender identities behave and process crises differently. Finally, the study suggests a starting point for organizations to measure their leaders' gender role identities to tap into various styles, depending on the crisis.

The difference between sex and gender is well documented but not well understood in everyday organizational speak. Sex refers to "the binary categories of male and female which are determined by biological characteristics of individuals, such as their physiological properties and reproductive apparatus." Gender is the "psychosocial implications of being male or female, such as beliefs and expectations of what kind of attitudes, behaviours, values, and interests are more appropriate for or typical of one sex or another." The concept of gender role identity is

less understood despite its introduction over fifty years ago by Sandra Bem as the “extent to which an individual possesses stereotypically masculine or feminine attributes.” Bem states that role attributes are socially and culturally constructed. They are based on masculine and feminine ideals and standards. Masculinity and femininity are independent dimensions rather than opposite ends.

Every person has a mix of masculine and feminine capabilities. Research shows that “androgynous” leaders (leaders with a balanced orientation) are the most effective. Bem developed a tool to measure androgyny, commonly used as a psychometric assessment called the Bem Sex-Role Inventory (BSRI). The tool yields three types of gender role identities, androgynous, feminine, and masculine. In our global study conducted between December 2020 and June 2021, 91 respondents completed a BSRI survey. We then calculated their androgyny score and selected senior leaders for in-depth interviews. We conducted in-depth interviews with 20 leaders with over ten years of people management experience in leadership roles during the pandemic. Using a theories-in-use approach, we suggest a series of propositions that connect gender role identity to crisis sensemaking. We also propose a way forward for future research for three types of gender role identity cases - masculine, feminine, and androgynous leaders.

Introduction

The COVID-19 pandemic disrupted worldwide economic, political, gender, and workplace dynamics. Long-standing beliefs about where we live, what we need, how we work, and who can lead are under scrutiny. According to an IBM survey of 3,450 executives in 20 countries

across 22 industries in 2020, crisis management became a top corporate priority, focusing on workplace safety and security. Leaders play an influential role in making sense of situations and deciding the way forward on behalf of the organizations they serve. During an HBR CEO roundtable held in the early days of the pandemic, Chuck Robbins, Cisco CEO, shared, "the culture of organizations, and their people, and how leaders show up during this moment – all of that will define who's going to be successful in the future." (Scoblic, 2020). The impact of decisions by leaders across industries and countries will be profound and defining. Almost two years into the pandemic, many leaders are evaluating the effectiveness of their decisions and making new ones in the face of uncertainty and subsequent waves. These decisions include work-from-home policies, business travel, customer service, salaries, and headcount (hiring and firing). Which strategies should they stop, start or continue in the medium and long term? The future of work will reflect both pre-existing beliefs and values and new priorities and processes resulting from changed mindsets. "The myriad related crises of the second year of the pandemic – including a supply chain gone haywire, a topsy-turvy labour market, and constantly evolving public health guidelines turned executives' projections into estimations and return-to-office dates into fairy tales." (Gelles and Goldberg, 2021). Understanding how leaders make sense of the crises thus invites deeper study by both scholars and practitioners alike. "Covid-19 is a wake-up call for us, as organizational scholars, to join forces with our community partners to translate our work into practical solutions that make a meaningful change." (Stephens et al., 2020).

Sensemaking is an essential precursor to decision making and has been studied extensively in the context of crisis (Christianson & Barton (2021); Gilstrap, Gilstrap, Holderby & Valera

(2016); Hennekam & Shymko (2020); Maitlis & Christianson (2014); Maitlis & Sonenshein (2010); Nathan (2004); Sandberg & Tsoukas (2015)). Due to their unexpected and exogenous nature, crises are appropriate for studying sensemaking. Stephens et al. (2020) engaged in an extensive sensemaking exercise with other scholars and collated a list of research questions in light of the pandemic (see Appendix I). Notably, the question “how will pandemic-influenced work-life practices interact with intersecting identities (e.g., gender, race, class, age, ability, virus exposure status)?” (p. 443) got us thinking about the role of identities, specifically gender identities, during the crisis and whether gender played a role in how leaders made sense of the crises.

Female CEOs and country heads have also been highlighted for their relative effectiveness in leading during the pandemic, emphasizing their biological gender as the key differentiator (Johnson, 2021). While the number of women in leadership is underwhelming, there is growing awareness of the "Think Crisis-Think Female" and Glass Cliff theories (Ryan and Haslam, 2009), which suggest that women are more likely to be selected to run companies in crisis. The assumptions made in these conversations are that women handle crises differently than men would, and perhaps even better. Is this assumption valid? Is it their biological sex that makes them different, or is there something else at play here? We believe that gender role identities play a more significant role than simply biological sex in validating this assumption. This starting point leads us to our research questions: **a) how do leaders sensemake in a crisis? b) what purpose does gender role identity play in sensemaking during a crisis?**

Using a theories-in-use qualitative approach, we answer these questions by drawing on relevant and well-established constructs such as sensemaking and gender role identity. Our research method involves an online survey based on the Bem Sex Role Inventory (1973) followed by in-depth interviews with senior corporate leaders (with 10+ years of people management experience) active during the COVID-19 pandemic. Based on grounded research and a comprehensive literature review, we propose a way forward for future research for three types of gender role identity cases - masculine, feminine, and androgynous leaders.

This study addresses several gaps in extant literature. First, at a theoretical level, though identity has been acknowledged as essential to explain leader sensemaking in a crisis, there has hardly been any empirical research on how gender role identity impacts leader sensemaking during a crisis (Jonsdottir et al., 2015; Maitlis & Sonenshein, 2010, 2014). Sensemaking literature has remained agnostic about gender identity (Mills et al.). There has been little to no mention of gender within sensemaking scholarship, specifically when it comes to sensemaking in a crisis. If gender is explored, it has only been at the level of biological sex. In this study, we build on the concept of gender role identity to nuance the explanation of gender in sensemaking literature (Ancona, Williams, & Gerlach, 2020; Weick, Sutcliffe & Obstfeld, 2005). Third and finally, there remains a paucity of ideas around gender and leadership sensemaking in a crisis for practitioners. While sensemaking is well established in academic literature, it is not well understood or applied in the real world (Ancona et al., 2020). As a result, there is a big gap between academics and practitioners' understanding and identification of leaders who can most effectively navigate crises. This study and its model aim to elaborate on existing sensemaking theory to be more practically relevant and actionable for leaders in crisis.

Therefore we expect the findings of our study will help organizations better prepare for future crises and disruptions and improve leadership effectiveness by incorporating gender role identity and sensemaking capabilities into their leadership criteria and conversations.

Literature Review

In one of the first published academic papers on the impact of COVID-19 in the workplace (Kniffin et al., 2020), the authors raise two related questions for leaders:

1. How are leaders adapting their styles in response to shocks/crises such as the current pandemic?
2. Despite the documented preference for masculine leaders under crisis, is feminine (versus female) leadership more effective in extreme crises?

These questions serve as bread crumbs for a literature review on gender and leadership. Our literature review spans several fields: organizational behaviour, psychology, identity, and leadership. We prioritize two constructs, sensemaking and gender, with crisis as the specific context to focus our research efforts. Leadership literature covers crisis and gender extensively, while sensemaking literature focuses on crisis and identity. Gender and, more specifically, gender role identity and sensemaking are hardly studied together; little is understood about how masculine leaders make sense of crisis differently than feminine leaders, if at all. To bridge the gap between the two bodies of literature, we also study identity in the context of gender to understand how masculine and feminine leaders operate in crises, regardless of their biological sex. We attempt to triangulate crisis management, sensemaking,

and gender streams of literature to understand better how masculine, feminine, and androgynous leaders sensemake in a crisis.

Sensemaking

Sensemaking is “a conscious exercise and is triggered as people try to make sense of what is going on and ultimately how they should react to the unexpected change” (Weick, 1995). It involves the “retrospective development of plausible meanings that rationalize what people are doing.” People get cues from their surroundings and connect them based on specific frames to create an account of what is happening (Weick, 2008, as cited in Maitlis and Sonenshein, 2010). Sensemaking relies on words to communicate as situations, organizations and environments are *talked* into existence. Sensemaking answers the core question “What is the story here?” to make meaning, often followed by “Now what should I do?” to trigger action. Weick theorized that the organization emerges through sensemaking, not the other way around. Organizations do not engage in sensemaking; individuals do, so understanding organizational behaviour at the macro level is not helpful without understanding how individuals process information and cues to make sense. Leader sensemaking refers to “their capacity to recognize the emergence of an urgent threat requiring remedial action and to grasp an unfolding crisis process, to understand what can be done to stop it or minimize its impact.” (Ansell et al., 2014). In a study of 43 US non-profit leaders, researchers found that leaders sensemake *and* sensegive during a crisis (Gilstrap et al., 2015). Sensegiving happens when leaders “enact interpreted versions of environmental conditions and then share their interpreted understanding with the larger organization.” (Bartunek et al., 1999, Weick, 2001, as cited in Gilstrap et al., 2015).

Sensemaking is triggered when there is a gap between the world's current and expected state. For instance, when there is disruption due to the pandemic, sensemaking occurs both during and after the disruption. People look to return to normal by seeking reasons that will enable them to resume the interrupted activity and stay in action. These reasons draw from plans, expectations, acceptable justifications, institutional norms (both traditions and constraints) inherited from experience or predecessors. If getting back to normal is elusive, sensemaking moves to identifying substitute action or further information processing. Hence, sensemaking serves as a springboard to action through ongoing and swift interpretation. Individuals follow a process of sensemaking as summarized in the following flowchart:

Figure 1: The Process of Sensemaking



Source: Derived from Weick, Sutcliffe, and Obstefield (2005) (P. 411-413)

Sensemaking is not about being accurate or making “the right decision.” Rational decision-making involves selecting a course of action from a list of alternatives related to solving a problem in a relatively stable situation. Sensemaking is about constructing a plausible story based on one’s mental model or the context and is further refined through sharing with others and as more data emerges. As discussed earlier, sensemaking occurs when there is a discrepancy in expectations, making it a very emotional experience in an organization. Given the ambiguity and emotion associated with crises, sensemaking is a much more helpful construct than rational decision-making to study leaders in a crisis.

Sensemaking is the first of five tasks of crisis leadership (Boin et al., 2005, as cited in Meisler et al., 2013). The other four tasks are making the right decisions for dealing with the crisis, framing the crisis for stakeholders (or sensegiving), solving the crisis to restore normalcy to the organization, and learning from the crisis. Sensemaking in crisis contexts “focuses on abnormalities as well as those processes considered appropriate to respond to those abnormal situations.” (Gilstrap et al., 2015). In a crisis, people are psychologically conditioned to trick themselves into believing “it will not happen to them” (Kahneman, 2011 as cited in Ansell et al., 2014). The *threat-rigidity thesis* suggests that leaders under crisis-induced stress cling to pre-existing world views and old behavioural patterns (Ansell et al., 2014). A study of non-profit leaders concluded that “effective crisis leaders are not merely reporters who, amongst other things, communicate before, during and after disruptions in organizations. Instead, effective crisis leadership depends on the ubiquitous communication across organization types, targets, and temporality with leaders sharing their understanding of known crises across their networks and relationships.” (Gilstrap et al., 2015)

Weick (1988, 1995) introduces three interrelated concepts for crisis and sensemaking. The first two are commitment and expectations. Public commitment and private expectations (or lack thereof) cause blind spots that could make bad crises worse. The third, and the one of most interest for our research area, is identity. Sensemaking is a process by which meanings materialize that inform and constrain identity and action (Mills 2003 as cited in Weick, 2005). When filtered through the lens of identity (whom we think we are), sensemaking affects how we notice, bracket, label, and other activities laid out in the process in Figure 1 introduced earlier.

In a crisis, identities destabilize when other people's image of us changes; individuals and teams lose important anchors about themselves. Identities can be strong or weak, shared or individual. A threatened identity constrains action. When someone holds only their identity even though it is no longer "relevant or helpful" in a crisis, it can inhibit sensemaking (Wicks, 2002, as cited in Maitlis and Sonenshein, 2010). Instead of channelling energy toward making sense of the situation, individuals turn inward and ask questions such as "Who am I? What am I doing? What matters to me? Why does it matter?" One type of individual identity is gender. Few studies explore gender and sensemaking in a crisis, and even among those that do, they primarily use biological sex (male or female) to study gender's influence (Hennekam and Shymko, 2020; Jonsdottir et al., 2015). We believe that this way of using gender remains superficial and propose that gender identity provides a more nuanced approach to exploring sensemaking in a crisis (Powell, 1982).

Gender Identity

Identity work is the "range of activities that individuals engage in to create, present and sustain personal identities that are congruent with and supportive of the self-concept" (Snow and Anderson, 1987). Most identity work shows that it "acts either as a barrier to change or as a coping mechanism to accommodate change at the individual level." (Kreiner et al., as cited in Lifshitz-Assaf, 2018). Identity can happen at an individual, group (organizational/professional), or national level. Our research will focus on identity at the individual level. While the degree of disruption caused by crises on individual and group experiences vary, irrevocable changes push individuals to re-evaluate social identities and practices. Social identity theory focuses on the social categories of identities. "Individuals use their social identity to perceive themselves in relation to categories or groups of other people in particular contexts drawing on prototypes of the group member role and behaviour (Tajfel and Turner, 1986, as cited in Jonsdottir et al., 2015). One such powerful social identity is gender. We must first distinguish between personal and role identity when studying gender.

Biological sex is an example of personal identity; it is the biological difference between male and female. It cannot be altered based on will. Jonsdottir et al. (2015) conducted a study of board directors pre and post the 2008 economic crisis looked at the impact of directors' social identities on how they approached their board responsibilities. In this study, researchers focused on the role of biological sex on how they approached their board responsibilities. They found that female board directors approached their roles differently than their male counterparts during business as usual. Female board directors focused on monitoring the CEO's activities while the male board members, especially tenured ones, focused on resource allocation and approvals. However, after the financial crisis, male and female board members

were more similar in how they approached the role. In this case, the crisis context served as a mediator between board member role identity (not biological sex) and their degree of monitoring vs resource provision roles (Jonsdottir et al., 2015). In a crisis, board members sensemake that they need to be more hands-on and engaged to protect their reputations and adapt accordingly.

Role identity is different from biological sex. It is cultivated based on characteristics, hopes, and positive emotions derived from a person's specific role (Avolio et al., 2004, as cited in Sim et al., 2019). Gender role identity is "the extent to which an individual possesses stereotypically feminine or masculine attributes" (Bem, 1974, as cited in Wolfram and Gratton, 2014). These attributes are socially and culturally constructed based on masculine and feminine ideals and standards. Research shows that gender role identity is more important than sex when describing a good manager (Powell, 1982). We can measure gender role identity using the Bem Sex Role Inventory, which calculates an androgyny score. There are four types of gender role identities:

1. Sex-typed: when their biological sex matches their gender role identity, i.e., masculine male or feminine female
2. Sex-reversed: when their gender role identity is opposite to their biological sex, i.e., masculine female or feminine male
3. Androgynous: possesses both masculine and feminine traits (scores high on both feminine and masculine traits).

4. Undifferentiated: possess a few masculine and few feminine traits (score low on both feminine and masculine traits)

While gender has been studied extensively in social sciences, gender in management literature is more recent. Virginia Schein's (1973) findings on gender stereotypes are widely cited. She found that men were more likely to be successful as managers. Research over several decades has supported the positive relationship between masculine leadership traits and managerial success, thus coining the widely cited "Think Manager, Think Male" (TMTM) association. It is easy to confuse masculine and feminine competencies with male and female gender due to stereotypes like "Men are from Mars and Women are from Venus" and "Think Manager-Think Male." The following table summarizes the differences between masculine and feminine leadership (Esser et al., 2018):

Table 1: Masculine vs Feminine Leadership (Esser et al., 2018)

Masculine leadership	Feminine leadership
Attributes: Aggressive, assertive, decisive, mastery, competence, hierarchical, individualistic, power and influence, driven by money, ambition to achieve personal success	Attributes: Generative, cooperative, creative, empathy, caring, emotional sensitivity, ability to listen and help younger colleagues, collaborative, compassionate, communal
Styles: agentic, task-oriented, autocratic, directive	Styles: relationship-oriented, democratic, participative
Professional Competencies: Determination, effective use of power, stress resistance, willingness to take risks, and responsibility	Professional Competencies: Determination, persistence

Personal Competencies: Self-promotion, self-confidence, achievement orientation	Personal Competencies: Balance between self-promotion and humility, self-awareness, self-responsibility
Communication: ability to build networks, ambition	Communication: empathy, ability to listen, ability to motivate and inspire others, developing and mentoring others
	Analytical: Critically review existing processes, find alternatives, holistic thinking

Several studies find that women are not as successful if they adopt only masculine leadership traits that have helped men be successful (Esser et al., 2018; Powell, 1982, 2002). So, they should not try to “act like men.” Role Congruity Theory (Eagly et al., 2002) helps explain the extent that gender stereotypes put guardrails on how women can behave and lead, depending on the industry or context. According to the theory, “To be effective leaders, women need to show certain masculine qualities, but when they do, they are rejected because they are considered ‘square pegs in a round hole,’ outside their traditionally accepted role.” The “double bind paradox” between what they do and what they are culturally expected to do leads to poor evaluation or downright rejection.

Over the last decade, female leaders like Indra Nooyi, Virginia Rometty, Sheryl Sandberg, and Marissa Mayer took prominent roles in Fortune 100 companies. Many less visible female leaders play important board and C-Suite roles in public and private sectors. Researchers who

follow the performance of female leaders theorize that they were less successful than their male counterparts, not because of their leadership competencies but due to systemic gender bias in leadership appointments. Women leaders have to straddle the tight rope of neither being too masculine nor too feminine to be respected as a leader. They have to be both competent *and* likeable. One interviewee in the study summarized this aptly: "The charm lies in the right mix between power awareness, a natural femininity, and the ability to switch flexibly between masculine and feminine ways of debating." Female leaders have more expectations on how they should think and behave, affecting how they make sense during a crisis.

Embry et al. (2008) tried to understand how gender consistent styles impact leader effectiveness through a blinded study (gender of the leader was unknown). The key findings were that 1. The feminine (transformational) style was perceived more positively than the masculine (transactional) style; 2. Male leaders using a gender inconsistent style were rewarded, but women leaders were penalized if they stepped out of their gender role, and 3. Female participants rated female leaders using a masculine style more positively than male participants. This last point enforces the importance of workgroup sex composition and how the subordinate/employee gender makes a difference in how a leader is perceived. Kark et al. (2012) also found that female employees perceived female managers as more "masculine" than their male counterparts, and the opposite was true for males. This finding indicates that in same-sex teams, gender stereotypes weaken compared to gender-diverse teams.

Wolfram and Gratton (2014) studied the relationship between leadership behaviour and workgroup performance with manager gender self-concepts as a moderator and gender as a

mediator. Gender role self-concept is used interchangeably with gender role identity. The two key findings of the study were that 1. It is advantageous for women leaders to have masculine or feminine attributes, and 2. For male leaders, androgynous (masculine and feminine) leadership is key to team performance. Kark et al. (2020) found that while androgyny benefits men and women similarly, women are penalized more than men for not being perceived as androgynous. A female leader was given lower ratings by both male and female employees if she could not demonstrate both agentic and communal aspects of the gender role. Interestingly, male employees had lower expectations of their male managers regarding leadership style.

Contemporary leaders are a mix of masculine and feminine to varying degrees. Esser et al. (2018) defined androgynous leadership as "the ability to integrate both masculine and feminine leadership competencies." While androgyny benefits men and women similarly, women are penalized more than men when sex-reversed (Kark et al., 2020), i.e., if they do not act according to gender expectations. Here situational leadership plays a role: female leaders *must* use a mix of masculine or feminine leadership styles, but male leaders *can* use both styles, regardless of whether their employees are male or female. Therefore, it is essential to distinguish that androgynous leadership is an innate skill, whereas situational leadership is a learned/practiced skill. Successful female leaders must master situational leadership and have a built-in balance between masculine and feminine energies to level the playing field with their male counterparts. The true test for any leader, male or female, is a crisis. The extreme nature of crises makes them relevant to understanding how leaders perform under pressure.

Crisis

An organizational crisis is a "low-probability, high-impact event that threatens the organization's viability. It is characterized by ambiguity of cause, effect, and means of resolution, as well as by a belief that decisions must be made swiftly." (Pearson and Clair, 1998, as cited in Maitlis and Sonenshein, 2010). Sheaffer et al. (2011) defined a crisis as "an uncommon event that demands swift and resolute response while constituting a considerable threat to survival." The three conditions of crisis are a high threat, urgency, and deep uncertainty (Ansell et al., 2014). The modern crisis is highly complex because of globalization, deregulation, and the rise of social media, making its impact felt quickly beyond borders (Meisler et al., 2013).

The table below shows the major types of crises leaders and organizations face. We believe the pandemic served as a context for every type of crisis to surface: financial, informational destruction of property, human resources, reputational, and even violent behaviour.

Table 2: Major types of crises faced by leaders and organizations

Type of Crises	Past Examples	Crises due to COVID-19 Pandemic
Financial (e.g.)	Labour strikes and lockouts, boycotts of products, stock price drop, lawsuits leading to fines, significant earnings decline due to product obsolescence.	Government Lockdowns resulted in supply chain issues, small businesses shutting down, layoffs
Informational	Hacking leads to customer privacy violations, Loss of proprietary or confidential information, invalid patents	Work from Home, resulting in confidential information and conversations in remote settings. Multiple gigs in violation of employment contracts.
Destruction of Property	Flooding, fire, hurricanes, aircraft crashes, toxic chemicals destroying factories or stores	Open office design requiring complete reconfiguration of spaces to create COVID safe protocols.

		COVID breakouts require floors to be shut and decontaminated.
Human Resources	Key executive exodus to competitor, sudden and unanticipated workforce turnover, lack of proper visas for key technical employees, a large number of key employees are sick (or pretending to be sick) on the same day, key executives become mentally unfit to lead	Employees and their families get sick, are hospitalized, and die in many cases/ Work from Home burnout due to lack of childcare and support. There are mental health issues due to isolation, anxiety about getting sick, and job loss.
Reputational	Negative social media that goes viral, media expose about bribes to win contracts, sexual harassment, affairs between execs and employees	Negative PR about forcing employees to come back to work too soon and a lack of compassion towards affected employees and customers.
Violent Behaviour	An outsider enters and kills employees, employee attacks/rapes/kills other employees, kidnapped executives, customer stampede in stores	Attacks on front-line workers who enforced government or company guidelines on masking and vaccination.

Source: Expanded, adapted, and updated from Mitroff (2002). From crisis management to crisis leadership, P. 293.

The pandemic is a financial crisis because of the financial impact of lockdowns on businesses dependent on face-to-face customer transactions and experiences. Many small businesses were forced into layoffs and salary cuts and even shut down due to government restrictions. It is an informational crisis because as employees moved to remote working arrangements, they were regularly in shared spaces with family members and others sheltering with them, while dealing with confidential company information. There were also reports of employees taking on gig work on the side or doing multiple jobs simultaneously, violating their employment contracts. It was a destruction of property crisis because of how the virus spread throughout workplaces, forcing them to reconfigure spaces and reduce the capacity of indoor facilities. Many offices were converted into COVID wards as hospitals filled up during the peaks. It is, above all, a human resource crisis because of the physical and mental toll imposed on

employees and their families. Employees experienced direct and indirect effects of the virus, either because they or their family members got sick or died and because of burnout caused by longer working hours and anxiety resulting from fear of getting sick, isolation, or loss of income. The media scrutiny on political and corporate leaders about balancing lives and livelihood makes it a reputational crisis. Negative PR and social media stories went viral about organizations that made their employees come back to the offices too soon, only to find employees getting sick and even dying. Organizations were also under pressure to donate to various COVID-19 relief efforts and provide more flexibility in repayments to ensure they looked empathetic towards affected communities and customers. Finally, as different governments instituted various and frequently changing travel restrictions and mask and vaccination requirements, emotions and anxieties ran high amongst customers, resulting in violent attacks on front-line workers like retail, restaurant, nursing, delivery, and airport workers.

The onslaught of the crises triggered by the pandemic makes this an ideal time to study leadership. According to Dubrin (2013), crisis leadership is “the process of leading group members through a sudden and largely unanticipated, intensely negative and emotionally draining circumstance.” Effective crisis leaders are “charismatic and inspiring, can think strategically (see the big picture), able and willing to express sadness and compassion and be willing to accept responsibility.” In response to a crisis, effective leaders maintain a sense of urgency and practice adaptive leadership, which means they use this window to hit reset and make changes to make the organization more resilient (Heifetz et al., as cited in Dubrin, 2013).

Crisis leadership has also been studied extensively through a gender lens. Ryan and Haslam (2005, 2008) posit that “women are more likely than men to be selected to lead in times of poor company performance,” which they coined as the Glass Cliff Theory. The authors found that the timing and company context in which a company brings on a woman leader matters. In their study of the FTSE100, Ryan and Haslam (2005, 2008) found that companies were consistently underperforming *before* the appointment of the female board member. They pursued controlled experiments to establish a causal relationship between company performance (predictor variable) and gender (outcome variable). These studies conclusively showed the presence of Glass Cliff; women candidates were hired to lead companies whose performance was declining.

Ryan and Haslam went a step further to understand why the Glass Cliff exists. Why are women often placed in precarious leadership positions (or take roles that men do not want) where they are more likely to fail, thus perpetuating the “Think Manager, Think Male” (TMTM) relationship (Schein, 1973). In a subsequent study, Ryan and Haslam (2010) reproduced the Schein study to understand the stereotypes associated with leaders in *unsuccessful* companies. They built their “Think Crisis-think Female” hypothesis on the Glass Cliff theory. Through three studies, they concluded that while the TMTM relationship is still observed, it is not the desired state. Respondents believed that the ideal manager of a successful company possesses both masculine and feminine (i.e., androgynous) leadership traits. However, all respondents associated feminine traits with unsuccessful managers.

A study of 231 top Israeli executives found that masculine traits like authoritativeness and resoluteness are helpful at the height of a crisis (Esser, 2018). The study also found that masculine leaders are more crisis-prone or less prepared for a crisis than feminine leaders (men and women alike). Crisis-prone is "the lack of readiness on the part of the top echelon, in terms of awareness, and the dearth of contingency plans and coping mechanisms." On the other hand, feminine leaders are more crisis prepared or anticipatory; They set up an organization to prevent or weather crises effectively. While the researchers fall short of declaring who is more effective at managing crises, research supports that feminine leadership is more anticipatory and sets up an organization to prevent or weather crises. In contrast, masculine leadership is more reactive and instinctive when in the middle of a crisis.

These and other subsequent studies show that when organizations choose women to lead through a crisis, they are expected to play more static than dynamic feminine roles. Based on Jungian psychological archetypes, static women leaders should be more behind the scenes and serve as solid people managers, guiding and supporting their team members through a difficult time. While they should be accountable for the company's performance, they do not have as much agency as their male counterparts to improve its trajectory through actions or serve as a spokesperson, perpetuating the strong but silent mother figure in a patriarchal system. While sex stereotypes continue to persist in how female leaders are expected to lead, does biological sex really matter when leaders are faced with a crisis? We will explore how gender impacts leader sensemaking in crisis through a grounded research study described in the next section, going a step further than previous studies by studying both the impact of biological sex AND gender role identity in crisis sensemaking.

Research Design and Methodology

While identity and crisis contexts are present in sensemaking literature, there is no mention of gender role identity (Gilstrap et al., 2016; Maitlis and Sonenshein, 2010; Sandberg and Tsoukas, 2015; Zabrodka et al., 2016). This oversight may be due to a few reasons: persistent gender stereotypes about males and females in the workplace, assumptions regarding gender bias within the academic community, and expediency in data collection, as it is easier to identify respondents based on demographics than psychographic profiling. Our research design attempts to address these gaps and select an interview pool based on gender role identity and not just biological gender, which, to our knowledge, makes this study the first of its kind. Gender role identity requires respondents to complete a psychometric survey with forty questions, reducing the number of respondents in the study and allowing us to select interviewees based on their gender role identity and not just their biological sex.

Research Design

We undertook an inductive qualitative approach to theory building. Our data consists of a survey and in-depth follow-up interviews with male and female corporate leaders with over ten years of management experience working in large enterprises. This two-step process (survey followed by interview) allowed us to select cases that balanced sex-typed and sex-reversed leaders. We then validated propositions using a theories-in-use approach (Zeithaml, 2020) by conducting additional interviews with leaders who actively managed teams during the COVID-19 pandemic. Under theories-in-use, we treated these participants like partners or sounding boards for our propositions, sharing details about what others contribute and getting them to react to the theories under development.

Since sensemaking and gender role identity are well-established theoretical constructs, we are not constructing a new theory from this research. Instead, we applied the process of "theory elaboration" (Fisher and Aguinis, 2017) to refine these theories. Theory elaboration research results in "new theoretical insights by contrasting, specifying, or structuring existing theoretical constructs to refine existing theory." We wanted to structure two constructs, sensemaking and gender role identity, by studying them together in a crisis context. Construct specification "creates clearer, more useful constructs and a better understanding of the nature of the relations involving those constructs." Construct structuring "is a tactic in which theoretical relations are elaborated on so that they accurately describe and explain empirical observations."

The prerequisite for robust theory elaboration is a thorough literature review (see Appendix 0). While crisis literature talks about leader sensemaking (and sensegiving), it only partially explains why some leaders sensemake differently than others in a crisis. Some papers suggest sensemaking occurs differently at different levels of the organization, while others talk about the role culture or work role identity plays. While Weick's sensemaking research is cited extensively, we feel that extant research has not studied how individual leaders sensemake in the middle of a personal and professional crisis. Also, no sensemaking article even mentions the role of gender role identity. Therefore, we hope that construct splitting and specification can fill in some of these gaps.

Data Collection

We first conducted an online survey to qualify the candidates for follow-up interviews. Between December 2-15, 2020, we distributed an online BSRI survey through LinkedIn. We collected the following data from the survey via Qualtrics (an online tool for designing and collecting survey data).

Figure 2: Online Survey Questions (based on the Bem Sex Role Inventory)

Section 1: Profile data to qualify respondents

- | |
|---|
| 1. Years of people management (people under your supervision) |
| 2. Seniority |
| 3. Biological Gender |
| 4. Job Function |
| 5. Work Location |

Section 2: BSRI Survey to measure gender role identity

The BEM Sex Role Inventory (BSRI) tests how masculine or feminine an individual is. It is based on an individual's self-assessment of how best a term fits them, based on a 7-point scale. There are up to 40 terms that are served up randomly that respondents must rate themselves on. Each term has a masculine or feminine association. For our survey, we selected 38 out of the 40 most commonly used terms as follows:

<i>Feminine Terms</i>	<i>Masculine Terms</i>
<i>Affectionate</i>	<i>Act as a leader</i>
<i>Cheerful</i>	<i>Aggressive</i>
<i>Childlike</i>	<i>Ambitious</i>

<i>Compassionate</i>	<i>Analytical</i>
<i>Does not use harsh language</i>	<i>Assertive</i>
<i>Eager to soothe hurt feelings</i>	<i>Athletic</i>
<i>Feminine</i>	<i>Competitive</i>
<i>Receptive to flattery</i>	<i>Defends own beliefs</i>
<i>Gentle</i>	<i>Dominant</i>
<i>Gullible</i>	<i>Forceful</i>
<i>Loves children</i>	<i>Has leadership abilities</i>
<i>Loyal</i>	<i>Independent</i>
<i>Sensitive to the needs of others</i>	<i>Individualistic</i>
<i>Shy</i>	<i>Makes decisions easily</i>
<i>Soft-spoken</i>	<i>Masculine</i>
<i>Tender</i>	<i>Self-sufficient</i>
<i>Understanding</i>	<i>Strong personality</i>
<i>Warm</i>	<i>Willing to take a stand</i>
<i>Yielding</i>	<i>Willing to take risks</i>

Note: The two terms we excluded were self-reliant and sympathetic because they are also excluded from other studies.

We received 91 responses to the BSRI survey. We calculated BSRI scores for those who answered all the questions; we had 43 masculine, 12 feminine, 14 androgynous, and seven undifferentiated respondents. Twenty-four were sex-reversed, and 31 were sex-typed. Seventy-nine were leaders with greater than ten years of people management experience. Of these senior leaders, 47 consented to a follow-up in-depth interview. 66% of those who consented were from India. This random sample provided us with more than enough respondents to

support the next phase of in-depth interviews. The table below summarizes the BSRI online survey responses.

Table 3: Summary of Online Survey Responses (December 2020)

	Total	India		North America		UK and Europe		Asia/MENA	
		Male	Female	Male	Female	Male	Female	Male	Female
		Senior	Senior	Senior	Senior	Senior	Senior	Senior	Senior
Total Count	91	30	19	3	3	6	6	6	5
Follow up interview	54	19	12	2	1	3	2	5	3

We then conducted twenty in-depth interviews in two phases. First, we conducted eight in-depth interviews with senior leaders between December 15, 2020 - January 5, 2021. Then we conducted twelve more interviews between June 13, 2021, and August 11, 2021. The interviews were split into two phases because, in phase 1, we went in with a more open-ended questionnaire to help us develop propositions. In Phase 2, we validated and refined those propositions. The detailed categorization is described in the data analysis section that follows.

Figure 3: In-Depth Interview Questionnaire

1. Facts/Crisis context	
a.	<i>What happened?</i>
b.	<i>How did you come to know about it? And when?</i>
c.	<i>Were others involved? Who (seniors/peers/juniors)? What role did they play?</i>
d.	<i>What decisions did you take? Could you detail a few?</i>
2. Actions discussion: How did you act?	
a.	<i>What did you do? How will you do it? For how long?</i>

- | |
|---|
| b. <i>How did you make any trade-offs or prioritize given the constraints?</i> |
| c. <i>How did you communicate information, work activities, dependencies to others?</i> |
| d. <i>How did you modify your regular work activities or reallocate resources? How?</i> |
| e. <i>Did you achieve the expected outcome? What would you do differently in hindsight?</i> |

3. Sensemaking

- | |
|---|
| a. <i>How did you make sense of the situation? What inputs provided these insights?</i> |
| b. <i>What was your interpretation of the incident? What did you consider most important?</i> |

4. Cognitive discussion: How did you think?

- | |
|---|
| a. <i>How did you make the decision from question 1d. (identified above)?</i> |
| b. <i>What options did you see in ways of analyzing it?</i> |
| c. <i>Did you soundboard with someone?</i> |
| d. <i>Did you spend time alone over it, or was it as a group?</i> |
| e. <i>Did someone help you make the decisions?</i> |
| f. <i>How did you anticipate and assess how your decisions and actions impact others (internal and external)?</i> |

5. Emotions discussion: How did you feel?

- | |
|---|
| a. <i>What kind of emotions did you feel when you heard about the crisis?</i> |
| b. <i>How has this affected your mindset?</i> |

c. <i>Did this impact the way you thought and took decisions?</i>
d. <i>How did you feel about trade-offs, compromises, if any, you had to make? Did you face value conflicts? If yes, can you name a few?</i>
6. <i>How have you developed capabilities to sense future crises?</i>
7. <i>Is there anything else you would like to share about your experience?</i>

Additional questions for Phase II interviews based on Theories-in-Use Approach (Zeithaml, 2020)

1) ***Construct hunting.*** *Some companies (and managers) have begun to consider diversity beyond gender. What do you think of when you think of gender?*

2) ***Assess construct boundary.*** *Would you say gender includes the notion of "Gender Role Identity"? If yes, what is your understanding? (If they do not know or have an incomplete understanding, offer the following academic definition: Gender role identity is "the extent to which an individual possesses stereotypically feminine or masculine attributes" (Bem, 1974, as cited in Wolfram and Gratton, 2014).*

3) ***Construct trapping.*** *Gender role identity is measured using the androgyny score calculated using the Bem Sex-Role Inventory. The survey you took before speaking to me calculates your androgyny score. Would you like to know your score and what it means? (if yes, then point 4)*

4) ***Construct meaning.*** *An individual's gender role identity can be sex-typed, sex-reversed, androgynous, or undifferentiated:*

- *Sex-typed: when their biological sex matches their gender role identity, i.e., masculine male or feminine female*

- *Sex-reversed: when your gender role identity is opposite to your biological sex, masculine female or feminine male*

- *Androgynous: possesses both masculine and feminine traits (scores high on both feminine and masculine traits).*

- *Undifferentiated: possess few masculine and few feminine traits (score low on both feminine and masculine traits)*

You are X. How does that make you feel?

5) Proposition development.

a) *Based on my interviews to date, gender role identity may be more relevant to how leaders like yourself make sense of crises than your biological sex. Thoughts?*

b) *Based on my interviews to date, I found that leaders of different gender role identities think of survival and success differently. Thoughts?*

6) Proposition credibility/internal validity. What do you think of the following propositions?

Does this hold true for you as a M/F leader?

a) *If a leader has a high feminine score, then, in a crisis, he/she*

i) *focuses on more group survival and success*

ii) *adopts a solution seeker mindset*

iii) *asks, "Who can help?"*

b) *If a leader has a high masculine score, then, in a crisis, she/he*

<i>i) focuses on individual survival and success</i>
<i>ii) adopts a problem solver mindset</i>
<i>iii) asks, "Who needs help?"</i>

Context and Cases

We set the macro context by providing the respondents with a standard definition of crisis at the beginning of the interviews.

2020 has been a challenging year for all of us. How have you been?

Let us talk about a crisis episode at work that took place during the pandemic.

The definition of a crisis is:

"A sudden and largely unanticipated, intensely negative, and emotionally draining circumstance." (Dubrin, 2013).

"An uncommon event that demands swift and resolute response while constituting a considerable threat to survival." (Sheaffer et al., 2011)

We asked them to talk about a crisis episode at work during the pandemic. Covid-19 served as the context backdrop against which leaders dealt with minor or major unexpected events, which we accept as crisis episodes because they took up disproportionate mindshare and created emotional turmoil and anxiety. One respondent explained, "The pandemic was still smaller compared to everything else. There were many smaller crises, which together became huge." The context for our Phase 1 interviews conducted in December 2020 was more uniform

across geographies than during phase 2. Leaders across the world, across industries, faced common challenges in the first three months of the pandemic because of sudden lockdown conditions. After the initial chaos, people adjusted to a new normal. During phase 2 interviews, more leaders in India were personally impacted by the Second Wave, even experiencing illness and death in their inner circle. Meanwhile, interviewees in other countries like Singapore and the USA, where vaccines were available, and the Delta variant had not yet hit those countries, focused more on non-Covid-19 triggered business challenges.

We selected phase 2 interviews based on purposeful sampling (Patton, 2002) to study the cases in depth. We used two sampling techniques – theory-based sampling and stratified purposeful sampling. We used theory-based sampling so that we could "sample incidents, slices of life, time periods, or people based on their potential manifestation or representation of important theoretical constructs." (Patton, P. 238). We selected the cases based on theory-derived criteria of masculine and feminine gender roles. An androgyny score, which measures gender role identity, can be calculated from the BSRI survey instrument, so the predetermined criteria for our sample were BSRI survey respondents.

We selected ten male and ten female leaders, all with greater than ten years of experience as cases. We also used stratified purposeful sampling, which is samples within samples. We had several strata within the broader sample of nineteen: six sex-typed (3 masculine males and three feminine females), six sex-reversed (3 masculine females and three feminine males), seven androgynous (4 males and three females), and one undifferentiated female (which we ultimately excluded from the final analysis). They represented diverse industries – financial

services, travel/airlines, marketing agencies (creative, research, and events), technology (B2B and consumer) services, video OTT and education technology. The leaders were based in various countries, and several had experience working in multiple markets. Thirteen respondents were in India, and six were in other markets.

Data Analysis

Calculating the Androgyny or A-Score

At the initial survey stage, we analyzed the survey responses by converting the 7-point scale into a numerical score and then calculated each respondent's Androgyny or A-Score.

Table 4: Androgyny Score Calculation by Case

The 7 point scale used was:

<ul style="list-style-type: none"> ○ -3 Never or Almost Never True ○ -2 Usually Not True ○ -1 Sometimes but infrequently True ○ 0 Occasionally True 	<ul style="list-style-type: none"> ○ 1 Often True ○ 2 Usually True ○ 3 Always or Almost Always True
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The sum of all the BSRI masculine scores minus the sum of all the BSRI feminine scores delivers a score to compare with the androgynous scale below:

Feminine: -20 or Less	Androgynous: -9 to 0 to +9	Near Masculine: +10 to +19
Nearly feminine: -19 to -10		Masculine: +20 or More

The resulting scores allowed us to easily select the cases we would target for the in-depth interviews as follows:

Table 4a: Selected Cases for Pilot Study/Phase 1 Interviews (December 2020)

Years of people management experience:	Seniority	Biological Gender	Job Function	Work Location – Country	Feminine Score	Masculine Score	Androgyny Score	Androgyny Scale	Role Congruity Scale
More than 15 years	CEO's Second Line (N-2)	F	Servicing/ Account Management	India	32	4	-28	F	T
10 - 15 years	CEO's Direct Report (N-1)	F	Sales	India	30	4	-26	F	T
More than 15 years	CEO's Second Line (N-2)	M	Technology	India	31	26	-5	A	A
10 - 15 years	CEO's Direct Report (N-1)	F	GM/ Group Head	Singapore	-1	7	8	U	U
More than 15 years	CEO's Direct Report (N-1)	F	Other	India	23	34	11	NM	R
More than 15 years	CEO's Second Line (N-2)	F	Finance/ Accounting/ Procurement	USA	0	19	19	NM	R
More than 15 years	CEO's Direct Report (N-1)	M	Sales	India	1	21	20	M	T
More than 15 years	CEO's Second Line (N-2)	M	Marketing	UAE	-3	28	31	M	T

Table 4b: Selected Cases for Phase 2 Study (June-August 2021)

Years of people management experience:	Seniority	Biological Gender	Job Function	Work Location – Country	Feminine Score	Masculine Score	Androgyny Score	Androgyny Scale	Role Congruity Scale
More than 15 years	CEO/MD	F	Marketing	India	20	20	0	A	A
More than 15 years	CEO's Second Line (N-2)	M	Marketing	Singapore	19	17	-2	A	A
10 - 15 years	CEO's Second Line (N-2)	F	Sales	India	33	31	-2	A	A
More than 15 years	CEO's Direct Report (N-1)	F	Sales	UAE	15	32	17	NM	R
More than 15 years	CEO/MD	M	GM/Group Head	India	21	26	5	A	A
10 - 15 years	CEO's Second Line (N-2)	F	Marketing	India	38	36	-2	A	A
More than 15 years	CEO's Second Line (N-2)	F	Marketing	United States	8	-2	-10	NF	T
More than 15 years	CEO's Direct Report (N-1)	M	GM/Group Head	India	11	36	25	M	T
10 - 15 years	CEO's Direct Report (N-1)	M	Sales	India	19	3	-16	NF	R
More than 15 years	CEO's Direct Report (N-1)	M	GM/Group Head	India	21	18	-3	A	A
More than 15 years	CEO/MD	M	GM/Group Head	India	24	14	-10	NF	R

More than 15 years	CEO/MD	M	Technology	India	34	20	-14	NF	R
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Key:

f: female m: male	F: Feminine NF: Nearly Feminine	M: Masculine NM: Nearly Masculine	A: Androgynous U: Undifferentiated	T: Sex-Typed R: Sex-Reversed
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Case Categorization using Grodal's Moves

The phase 1 study focused on theory construction using the active categorization framework for theory development (Grodal et al., 2021). We found that Grodal's moves helped us navigate hours of interview transcripts methodically and with purpose and not rush to conclusions or hypotheses. It also helped us expand our interview guide used in the phase 1 study with some additional questions to help us refine our categories in the phase 2 interviews. As qualitative researchers, we need to ensure we can "show the workings" on how we arrive at our propositions. Grodal's Moves helped us arrive at categories and propositions we felt had the most theoretical traction.

Figure 4: Analysing qualitative data using the case categorization process

Categorization process	Analytical stages	Researchers' active moves							Contribution to theory development	
		Asking Questions	Focusing on puzzles	Dropping categories	Merging categories	Splitting categories	Relating categories	Sequencing categories		Developing or dropping hypotheses
Generating initial categories	Initial data collection and analyses									Linking initial categories to past theoretical insights
Refining tentative categories	Further analyses and possible added data collection									Linking tentative categories to elaborate/challenge existing theories
Stabilizing categories	Re-analyses and theoretical integration									Creating a theoretical scaffold

Source: Grodal et al. 2021 (P. 592). For Illustration Purpose Only.

After conducting Phase 1 interviews, we used the active categorization process (Grodal et al., 2021) to lead us through theory construction. We generated the initial categories by listening to the phase 1 interviews multiple times to not only understand their crises but to

seek answers for our research questions: What is the role of gender (sex and/or identity) of a leader in managing crises, and how does the leader change in the process of managing the crisis? How does crisis impact leader schemata and self-narratives, and what role gender identity plays in their sensemaking during and after the crisis? A few puzzles surfaced after we listened to the interview recordings multiple times. The first puzzle was that some leaders focused on issues created by the sudden lockdown situation, like work from home and a steep dip in revenue, but not all crisis episodes were COVID-19 triggered. Several leaders faced evergreen challenges like challenging or underperforming colleagues at work or dealing with demanding clients. The second puzzle was that where there were similar issues, they indexed on different things, regardless of sex. Different leaders sensemake differently, even in a global crisis. The third puzzle was that leaders' schemas evolved as the crisis progressed. The crisis either reinforced, questioned, changed, or introduced new schemas. These three puzzles yield some initial categories such as COVID vs non COVID crises (See Section A and B below.) and the 4 Schemas Changes.

The Grodal method recommends “dropping categories that were generated during the initial part of the data analysis, but that turns out not to have theoretical traction.” It also recommends “uniting two or more existing categories to create a superordinate category or separating a category into two or more subordinate categories.” Accordingly, we dropped the Schema Change categories because there were not enough interesting insights. We also dropped COVID vs non-COVID Crisis Categories. The rationale for this was that whether the crisis was a COVID triggered was less important. Instead, we focused on use cases like work

from home and compared how respondents' sensemake differently within one use case. We created personas or aggregate case studies and named them with a single fictitious name.

As we looked at patterns amongst personas, we saw how leaders with different gender identities across use cases were sensemaking. We compared how different leaders had different goals and used different resources through the crisis episodes. Leaders of different gender identities were paired under the same use case. Upon analysing transcripts of interviews, we discovered two dimensions along which leader sensemaking differed: The goals they were pursuing (survival or success), and the other is the resources they use (group or individual). We created four temporary categories of sense-making orientation regardless of use case 1. Survival 2. Success 3. Group 4. Individual. In Phase 2, we renamed Survival to Preserve and Success to Perform to more accurately reflect the goals. The table below summarizes these steps to arrive at the final framework using Grodal's Moves (2021).

Table 5: Step by Step Theory development using Grodal's Moves (2021)

Grodal's "Moves"	What we found
<p>Asking Questions</p> <p>Approaching the data with specific questions we want answers to</p>	<p>Initial research questions/goals:</p> <p>What is the role of gender (sex and/or identity) of a leader in managing crises, and how does the leader change in the process of managing the crisis?</p> <p>How does crisis impact leader schemata and self-narratives, and what role gender identity plays in their sensemaking during and after the crisis?</p>

<p>Focusing on Puzzles</p> <p>Focusing on the part of the data that is most surprising or salient to us</p>	<p>Not everyone picked a crisis triggered by COVID</p> <p>Where there were similar issues, they indexed on different things, regardless of sex.</p> <p>Leaders' schemas evolved as the crisis progressed. The crisis Reinforced – Questioned – Changed – Introduced New Schemas.</p>
<p>Dropping/Merging/Splitting categories</p> <p>Dropping categories that were generated during the initial part of the data analysis but that turned out not to have theoretical traction/Uniting two or more existing categories to create a superordinate category</p> <p>Separating a category into two or more subordinate categories</p>	<p>We dropped the Schema Change categories because there were not enough interesting insights.</p> <p>Dropped COVID vs non-COVID Crisis Categories (See Section A and B below.) Whether the crisis was a COVID triggered was less important. Instead, we focused on use cases like WFH and compared how respondents' sensemake differently within one use case. We created personas or aggregate case studies and named them with a single fictitious name.</p>
<p>Relating or contrasting categories</p> <p>Comparing several categories and identifying relationships (or lack thereof) within them.</p>	<p>As we looked at patterns amongst use cases, we saw how leaders with different gender identities across use cases were sensemaking. We compared how different leaders had different goals and used different resources through the crisis episodes. Leaders of different gender identities were paired under the same use case and analyzed.</p>
<p>Sequencing categories</p> <p>Temporally organizing categories that we identified in the data</p>	<p>We saw four categories of sense-making orientation regardless of use case 1. Survival 2. Success 3. Group 4. Individual. (In Phase 2, we renamed Survival to Preserve and Success to Perform)</p>
<p>Developing or Dropping working Hypothesis</p> <p>Formulating overarching theory and, by iterating through the data, either finding or increasing evidence for it, leading to its elaboration, or finding contradictory or</p>	<p>We created a 2X2 matrix after phase 1 and then in Phase 2. We validated the matrix through additional data. We also interviewed more androgynous leaders in Phase 2 because there was not enough conclusive evidence in phase 1.</p>

unsupportive evidence, leading to its abandonment.	
<i>Source: Based on Table 2 (Grodal et al., 2021)</i>	

Stage 1: Generating Initial Categories: Covid-19 and non-COVID triggered cases

COVID-19 triggered crisis	Work from Home
	Layoffs/Salary Cuts
	Physical and mental health issues of self/family
Non-COVID-19 triggered crisis	Client Crises
	Performance Management/Firing
	New role/Interpersonal issues

Stage 2: Refining Categories: Developing Aggregate Case Studies

COVID-19 triggered cases

The three main categories of cases triggered directly by COVID-19 were the challenges related to work from home, layoffs/salary cuts, and health issues (self or immediate family, both physical and mental). This section extracts the salient insights from the interviews to develop a gender identity agnostic leader case study to simplify understanding of the different categories. These case studies will also be used for manager workshops to make this research more practical and valuable in the real world (more on this in the managerial implications section).

I. Work from Home

1. SS (F) is an experienced WFH manager having spent decades working remotely. SS(F) helped her young employees transition to WFH because of her experience. In her team 1-1s, SS encourages the team to step out of work in a space where they feel fine (e.g., Courses, fitness). In addition, SS lost her mother in the middle of the pandemic and allowed her team to share her grief.
2. MM (F) came into the office by July and had her new hires come into the office to help them settle faster.
3. ASH (A) let go of her city apartment and worked remotely throughout the pandemic from the hills and will continue to be remote. She led the team to start volunteering in the Second Wave to find oxygen, beds, etc., which was emotionally draining but gave people meaning.
4. ASa (A) got COVID-19 while running a workshop while working from her mother's home. She took care of her mother (who was COVID+) while her brother was on vacation.
5. RS (A) held daily WIP calls at 930am to help people stay connected throughout. This routine changed in the second wave to first checking in with how people are. They also did fun Fridays and learning sessions.
6. RS (A) pivoted his events management business to virtual events and doubled down on other digital services. The lockdown meant cancelling physical events. Clients who were dependent on face-to-face events to generate business needed alternatives to reach remote clients. He spoke to like-minded peers in other markets who had an optimistic outlook and were looking ahead. RS leveraged his industry and company relationships to ensure business continuity.

7. GV (M) has moved countries/cities to be in person with his team. GV moved houses in the middle of the pandemic. GV set up weekly 1-1 check-ins to allow venting and expressing frustration but does not share his challenges.
8. PO (M) felt she has become more careful with her words because one does not know what is happening on the other side as people are remote. In addition, she learned new skills to back up her India-based team members affected by COVID-19.

We synthesized these work from home cases into an aggregate case study called “Res Seth”:

Res Seth is the Vice President and Managing Director of FOI Experience Marketing Agency, India, a subsidiary of FOI Worldwide, the world’s largest and Ad Age’s No. 1 ranked event marketing agency. Res leads a team of over 100+ people present across five offices across India and has led the agency for over 18 years (since 2002). When COVID-19 hit in 2020, India went into a strict lockdown, which meant cancelling all physical events, representing 90% of FOI’s revenues. B2B clients depended on these face-to-face events to generate business and needed alternatives to reach remote clients. Res also needed to shut down their offices and enable teams to work from home. Events agencies have thin margins and many contractors involved in producing events.

Res ran daily 9:30 am WIP calls to stay connected to the team and planned fun Fridays and learning sessions. Res also moved homes in the middle of the pandemic. Res’ ageing mother, Sara, contracted COVID-19 during the Second Wave and had to quarantine with Sara to take care of her. During that period, Res also tested COVID-19 positive. While Res fully recovered, Sara passed away due to COVID complications.

II. Layoffs/Salary Cuts

1. AK (M) had to let good people go because of a company-wide layoff decided by the CEO. AK felt the way they handled layoffs was poor, especially expecting people to come into the office to be notified. AK decided to contact his impacted team members before getting a formal layoff notification. He disagreed with how the company was handling the layoffs, so he wanted to soften the blow.
2. NP (M) was part of the decision to take salary cuts, making her feel ok about it.
3. GV's (M) company decided no layoffs, but all VPs took 20-35% salary cuts.
4. MM (F) did not do salary cuts during the lockdown, pivoted the business to new technology, so had to ramp up hiring to acquire new skills.
5. PG (F) did not lay off his team of 6 despite their client of 12 years cancelling their project, which represented 80% of their top-line revenue. He did not want to leave employees in a lurch, despite no other projects to absorb them. He initially considered salary deferment for the team, but when 2 of the team members expressed financial hardship, he decided not to proceed with salary cuts either.
6. RS (A) was the decision-maker on salary cuts and layoffs. He decided to take the salary cut himself (20%), and the rest of the team followed (better than the industry's 50%). He also decided on layoffs based on 1. Performance "Will I keep this person in the next 2-3 years?" 2. Personal hardship.

We synthesized the various cases to develop an aggregate “Layoffs/Salary Cut” case study which we named “Alex Kig”:

Alex Kig is the Senior Vice President of Digital for a leading airline with over 20 years of experience in the travel industry. During COVID-19, with travel restrictions, the airline industry was forced to lay off thousands of people. Alex had to let good people go because of a company-wide layoff decided by the Airline’s CEO. Alex felt the way they handled layoffs was poor, especially since the company expected people to come into the office to be notified in person that they were being let go, despite the risk of COVID spread. Alex decided to contact the impacted team members before they got a formal layoff notification because of a disagreement on how the company was handling the layoffs and wanted to soften the blow. Alex also had to take a 20% salary cut and, soon after, decided to start looking out for a new role.

Alex moved to a new role as CEO of a niche technology services firm. Soon after joining, the company lost their largest client, who was in the travel and tourism space and contributed 80% of their top-line revenue. However, Alex did not lay off team members assigned to this cancelled project, despite no other projects to absorb them. Alex initially considered salary deferment for the team members, but when two expressed financial hardship, Alex decided not to proceed with their salary cuts. After Alex decided to take a salary cut of 20%, most of the team, who could afford it, followed suit.

III. Physical and mental health issues of self/family

1. ASa (A) contracted COVID herself while tending to her mother and infecting her son. Her kids blame her for bringing COVID into the house. Everyone recovered.
2. ASh (A) needed counselling because she dove into volunteering during the Second Wave and was heavily affected by the grief, desperation, illness, death around her.
3. RS (A) considered this one of the biggest challenges and felt drained because 90% of his business vanished overnight (F2F events). However, he never told anyone at work that he was not sleeping well because he was very worried.
4. GV (M) was in the middle of moving apartments when the lockdown was declared, so he was without a working fridge or Wi-Fi for weeks. He would work out of the building lobby to get better internet, and his family of five was managing with a small cooler instead of a fridge with small kids. GV did not feel comfortable talking to anyone because it could come across as privileged whining.
5. AC (M) had several immediate family members (grandparent, parents, sibling) contract COVID-19 in December 2020, followed by his wife having a brain tumour removal surgery in early 2021, all while starting a new job and having a new baby.
6. SS (F) mother passed away in the middle of COVID in another state, but the company gave her time and space to grieve.
7. PM (F) was on a sabbatical when the pandemic began and decided to launch an online platform to help MBA students become more employable in a difficult job market where many had their internships or job offers reneged.

We synthesized these cases into an aggregate case study called “Apurva Saber”:

Apurva Saber is the Chief Revenue Officer for a software company specializing in travel and hospitality. In October 2020, Apurva became chief of Staff to the CEO at an Indian conglomerate. In December 2020, Apurva had several immediate family members (grandparent, parents, sibling) contract COVID-19. After they recovered, Apurva's partner was diagnosed with a brain tumour and had removal surgery in early 2021, less than a year after a new baby. During the Second Wave (May 2021), Apurva volunteered and raised money to help people find hospital beds and oxygen concentrators. Apurva also mentored MBA students to help them become more employable in a difficult job market where many had their internships or job offers renege. Apurva is also an author of two books on social selling and growth hacking.

B. Non-COVID-19 triggered cases

There were also non-COVID-19 triggered cases such as client or PR crises, performance management/firing employees, and new role teething issues.

I. Client Crises

1. PB's (A) company set up a war room for top 100 clients to deal with a ransomware attack.
2. VK's (A) company set up a war room with 8-10 key leaders to deal with an Asia-wide internet outage caused by an accidental cut cable. Since it was not considered an Act of God, it was a considerable revenue risk. Daily updates on the webpage. While it took two days to figure out what happened, it took 15 days to resume regular services.
3. VK (A) felt they should have been more empathetic towards customers and the sales team during COVID-19. How will they pay on time if the customer's business is down?

Why are we pressuring reps? However, he did not speak up because he did not have that type of influence in the organization.

4. GS's (F) company decided to partially wind down operations during COVID, which angered investors and caused a PR/social media crisis. GS quickly hired and repurposed her team to become experts in online reputation management. GS leveraged experts to help her understand the technicalities.
5. PO (M) set up a Plan C and D to supplement Plan A and B for her must-win deals to ensure that if someone were out due to COVID-19, there would be others who can pick up the load, even if it meant she would have to roll up her sleeves and do it herself.

We synthesized these cases into one aggregate case study called “Phun Baru”:

Phun Baru is the Vice President of Delivery in the BFSI vertical for a Global IT Services Company, managing 15,000 associates and a P&L of \$900M. Phun is responsible for delivery/engineering excellence, pre-sales, client management, digital transformation, operations, and Innovation. Phun has been with the company for 17 years. In the middle of the Covid-19 pandemic, the company set up a war room for top 100 clients to deal with a ransomware attack. Usually, the team would visit clients onsite to reassure them, but because of COVID-19, they had to meet the clients virtually. The war room also included the corporate communications leader to manage the PR/social media messaging. Phun felt the corporate communications lead was getting in the way of solving for customers because of the constant asks for an update. Phun was also concerned about the number of people who were out sick with COVID during the Delta Wave. Phun, therefore, set up a Plan C and D to supplement Plan A

and B for must-win deals to ensure that if someone were out due to COVID-19, there would be others who could pick up the load. Phun needed to balance the needs of the business, the clients, and the team.

II. Performance Management/Firing

1. AC (U) fired a well-liked but non-performing leader who left the department in disarray. Her CEO pushed her to take this action. AC (U) then restructured and expanded the team. As a result, things are working better.
2. NP (M) has identified people she needs to let go to make room for fresh talent. She feels that her company is a great place to work lead to less capable people finding solace. However, NP wants fresh blood to help scale the business.
3. MM (F) faced resistance from some team members who were not motivated to upskill on new technology (Unreal), so she focused on hiring fresh graduates who would be more open.
4. BS (F) had an underperforming employee who was previously her peer. She gave him a heads up that he would not be getting a good performance review, and he subsequently left. She regrets how it played out because he was a good person; she focused on the symptoms rather than the root causes.

We synthesized these cases to develop an aggregate “firing/performance management” case study called “Ash Kimpo”:

Ash Kimpo is the Senior Director of Learning at a fast-growing EdTech start-up. With the support and guidance of the CEO, Ash gave a poor performance review and subsequently

fired a well-liked but non-performing leader who left their department in disarray. Ash also feels that less capable people who had been with the company since the early days took the company for granted. These employees operate differently, are not motivated to upskill, and have a fixed mindset. Ash wanted fresh blood to help scale the business to the next level. Ash identified people to let go to make room for fresh talent and a clean slate. Ash restructured and expanded the team to support a business that benefited from the move to e-learning during the pandemic. Ash hired a batch of fresh graduates who would all onboard remotely.

III. New role/interpersonal issues

1. VS (M) is a new leader facing resistance from her predecessor. She indirectly communicated to the previous leader via her team because she faced resistance as a newbie. She also overcommunicated information to equip them with daily insight for meetings.
2. PO (M) is three months new to a role. She set up three levels of backups for priority functions if her team members were out because of COVID-19 to have business continuity.
3. NP (M) is part of the old guard struggling with two new leadership team members. Nevertheless, she felt that she had the CEO's support in dealing with a difficult peer.
4. BS (F) was a contractor turned full time, and she now had to manage people who were her former peers, one of whom she needed to performance manage out of the business. Furthermore, HR was pushing her to do it in 2 weeks.

5. KV (F) lost his job after a new CEO came in and wanted to bring in his people. He was very transparent with his family and colleagues about his job loss. He applied a growth mindset to his job search and landed a new role within three months after learning a new technology online and leveraging his professional network. He onboarded remotely.
6. DK (A) got into a heated dispute with his boss over the future of the business. DK wanted his boss' buy-in on a team transformation to help scale the business, but he preferred the status quo. Soon after rejecting DK's proposal, his boss quit. DK ultimately moved out of the business and is still not speaking to his ex-boss.

We synthesized these cases into a single aggregate case study called “Van Sarna”:

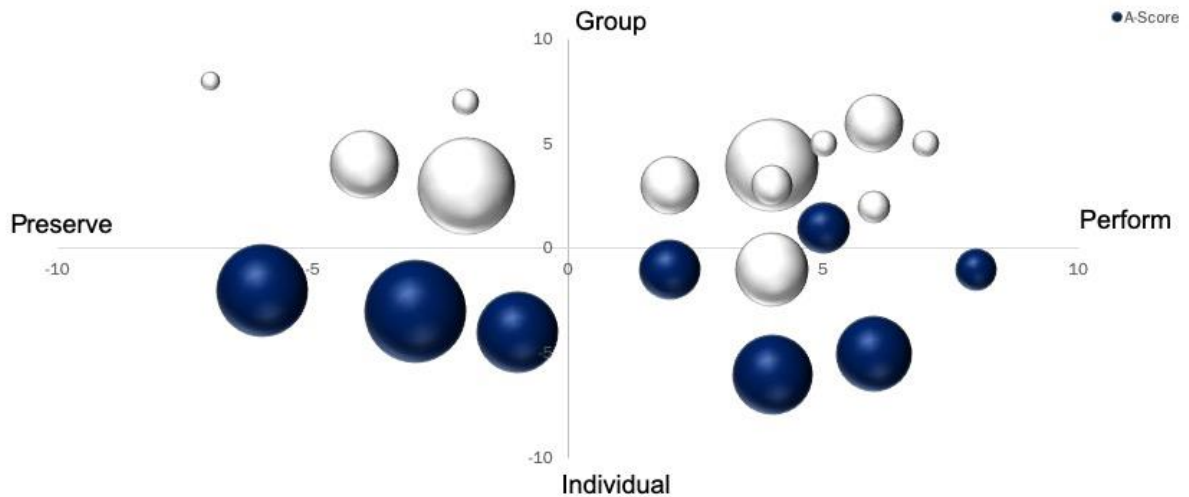
Van Sarna was made redundant during COVID-19. Van reached out to LinkedIn connections and secured a consulting gig for a bank. Three months later, Van was appointed full-time by the same bank as Director of Risk Management. Van focused on building relationships with direct reports and peers through video calls as a newbie. Onboarding remotely was a challenge, especially since Van faced resistance from the predecessor, Ty, who was quite territorial. Van got into a heated dispute with Ty during a planning session. Van wanted Ty's buy-in on a team transformation, but the latter preferred the status quo. Van also had to manage former peers, including one she had to manage out of the business. HR was pushing for an accelerated exit of this low-performing employee. To ensure business continuity, Van set up three levels of backups for priority functions to cover for team members while they were out of action because of COVID-19.

Stage 3: Stabilizing categories

In Phase 2 interviews, we focused on theory elaboration and construct splitting. After validating the dimensions as part of these interviews, we mapped leaders based on their gender role identity into a 2X2 matrix based on a qualitative analysis of hour-long interviews. Specifically, we wanted to study what and how sensemaking varies based on the biological sex or the gender role identity of the leader. Once we mapped the pilot cases to the dimensions, we saw some emerging patterns between and within gender role identities.

We plotted the individual cases based on their gender role and sex identity based on BSRI Survey data and qualitative interviews. Placing the cases into the quadrants allowed us to contrast the cases by gender role identity (as measured by the Androgyny Score), biological sex, and seniority. Our survey allowed us to collect all three of these parameters. While this analysis is not statistically significant, visualizing the cases based on subjective ratings helped us synthesize volumes of interview transcripts into a simple graph—this visualization ultimately helped us create the framework we discuss in the next section.

Figure 5: Gender Role Identity and Sensemaking Orientation



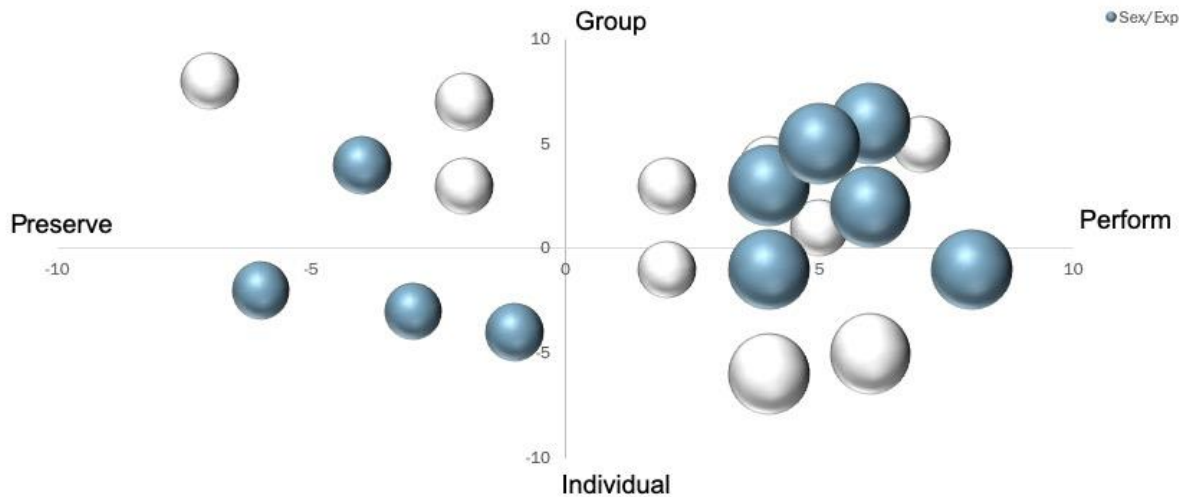
Legend:

Bubble Size = Androgyny Score. Smaller is closer to Androgynous

White is Negative A-Score (Feminine) | Blue is Positive A-Score (Masculine)

The graph above that plots gender role identity vs sensemaking orientation (discussed more in the next section) shows that feminine leaders (more white bubbles above the x-axis) and androgynous leaders (more small bubbles above the x-axis) have a stronger group orientation. We also see that the more masculine a leader (bigger blue bubbles on the bottom left), the more focused they are on individual preservation.

Figure 6: Biological Sex/Seniority and Sensemaking Orientation



Legend:

Bubble Size = Seniority in Organization (CEO, N-1, N-2)

White is Female | Blue is Male

This second graph plots biological sex and seniority in the organization (larger bubbles indicating more seniority). We did not see a clear distinction between male and female leaders' sensemaking orientation (similar number of blue and white on the right side of the Y-axis). We see that less senior male leaders (smaller blue bubbles) were more preservation-focused while more senior male leaders (larger blue bubbles) were more performance-focused. We also see that more senior women (larger white bubbles) were performance-focused.

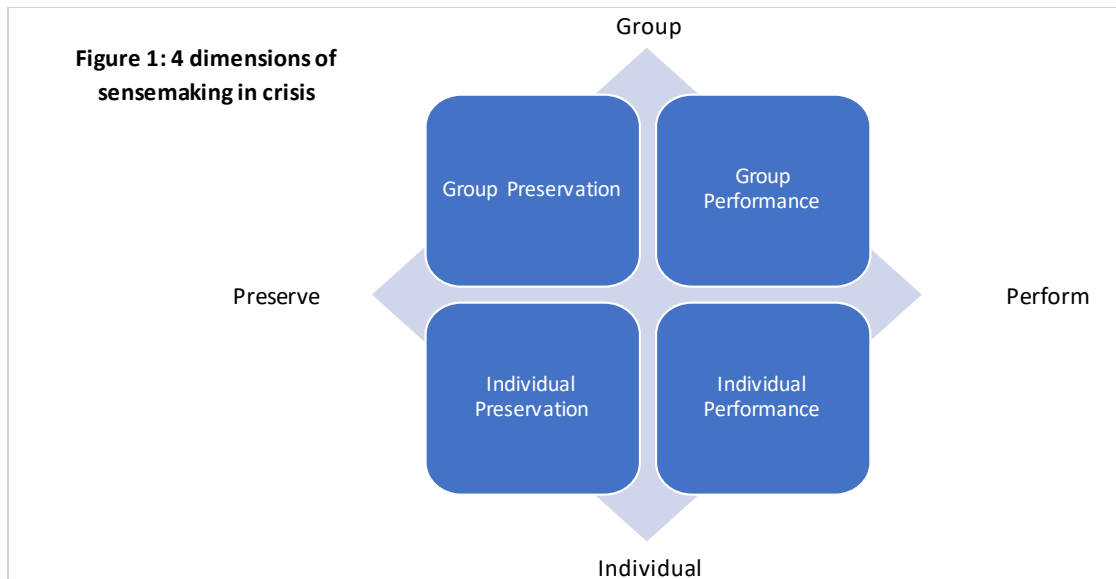
Findings

Construct Splitting: The four dimensions of crisis sensemaking

The four sub-dimensions – individual, group, preservation, and performance – each further explain the underlying sensemaking that occurs as the leader experiences unplanned or

unexpected events. These dimensions of crisis sensemaking are represented visually in the following graph.

Figure 7: 4 Dimensions of Sensemaking in Crisis



The framework acknowledges that sensemaking is a vast construct and needs to be further partitioned into additional dimensions to make it easier to understand and account for different leader responses. This theory elaboration method is called "construct splitting." We identified the four dimensions of sensemaking in the pilot study then validated them in the phase 2 study through additional questions in Figure 3. These four dimensions of the construct split are:

Individual Orientation

Some leaders focus on their individual or micro-challenges at work and home. Their sensemaking pillars of commitments, expectation, and identity are rooted in their own and not the group's capabilities. They have high expectations and are confident enough to act quickly

and decisively. They are committed to pulling out all stops to ensure things are in their control, even if it means taking on more work or learning new skills. Leaders with an individual orientation have high standards and self-expectations, primarily self-imposed. They also tended to share less of their challenges with the group.

"When you enter the room, the responsibility of a solution is yours." – sex-reversed reversed interview

"I am a hands-on worker; I put in the extra hours. I couldn't do everything, but whatever I could rescue, I did." Masculine sex-reversed interviewee.

"I'm used to a certain importance; I play a role which defines me. What happens when you don't stay relevant in the system?" - Masculine sex-reversed interviewee

"People looked to me for information. I felt important in the organization. They needed me." - Androgynous (female) interviewee

Leaders with an individual orientation see their identity as the fearless saviour. They are the protagonists of their stories, emphasizing how the crises and disruptions affected them personally. They saw the crisis as a problem to be solved, with them playing an active role in "putting out the fires." The questions they asked first were: "what does this mean for me?" and "what do I need to do?". Their actions supported the survival or success of the group, but they were the hero in their story. The primary question a leader with an individual orientation asks in a crisis is, "How can I help?"

"In a crisis, I get into action mode, solution mode. How to get over this and what next needs to be done. That's what I did." – androgynous (female) interviewee.

"At home, I'm seen as in charge. I set things in order. I felt pressure to say the right things. I better not go wrong. I was helping, but I was a wreck, I realized I needed support." – androgynous (female) interviewee.

"I now voice my opinion more, but it would depend on what is at stake earlier in my career." - androgynous (male) interviewee.

Group Orientation

Leaders with a more group orientation spoke about their team and organization more than themselves. They set the stage and spoke about their teams and peers like actors in a play. These leaders approach the crisis differently; they do not expect to have the answers but seek solutions for the group by asking the question, "Who can help?" They engage in group sensemaking to identify solutions and assign roles depending on their relative capabilities and not pre-crisis identities.

"I get my energy from the work-family I have (4-5 of us). It is what we have built together, we all have an opinion and voice, and we have gained each other's respect. I think how I can bridge the gap, what can we do." - feminine interviewee

"If it is a terrain where you don't know, you will seek advice. If you are knowledgeable and in command, you will shoot. I don't know the treatment of COVID, so I spoke to two doctors I trust, but I will not doctor shop; that creates confusion." - androgynous (female) interviewee.

"I got introduced to a new problem every day. I asked experts, collaborated with agencies and got in touch with industry peers, read books on crisis management." – androgynous (female) interviewee

Androgynous leaders demonstrated more of a group orientation than others.

Preservation Orientation

Leaders with a preservation orientation were concerned about co-workers and their families physical and mental well-being, business continuity of their own business, and their clients. The Preserve cases ranged from the negative impact of the lockdown and the second wave on the team because of sudden layoffs, illness, and death in the family. Preservation orientation leaders prioritized people first, including their safety and security, above all else.

"My priorities were to make sure my team was fine and to be there for customers." - Feminine sex-typed interviewee.

"It's hard because, in my personal values, I do people first and want to meet him where he is. I felt he has been in a very challenging situation over the past year; he's had trouble with childcare and ramping up at a new company. And all of those dynamics that have been very challenging." – Feminine sex-typed interviewee

"We stopped talking business, numbers. I am only safe when the next person is safe." - Androgynous (female) interviewee.

"But this is different because it's a health crisis. People are dealing with mortality. Its human cost." - Masculine sex-reversed interviewee.

Preserve cases also included leaders who started new roles during the pandemic and were insecure about their position because they faced challenges navigating a new work culture and building their internal network, which was difficult while onboarding remotely. Some interviewees spoke about individual preservation, be it job security or relevance. For example, company-wide layoffs negatively impacted leaders' feelings of trust and control at an organizational level. At a micro level, work-from-home made some managers feel less effective because they could no longer monitor and motivate teams in-person and be in the field with clients.

"The layoffs broke trust and revealed a gap with my personal values. I am helping my team members get placed. I am also looking out." - Masculine sex-typed interviewee

Leaders with a preservation orientation felt conflicted about giving negative performance feedback or managing these team members out, especially in a pandemic due to concerns about their mental and financial situations.

"It was a very challenging situation and where I was leaning into being "people first." Giving people the benefit of the doubt, to improve and develop him, and yet getting some feedback that, while he was a phenomenal person and very smart, it just didn't seem like the right fit for the company." Feminine sex-typed interviewee

"The HR business partner that I worked with; I didn't find her very helpful. She lacked empathy and said, 'Well, I don't like to lay people off towards the holiday season, so if we want

to do something, we have to do something in the next two weeks.' I felt this guy had no idea anything was coming his way like that. Didn't seem fair." - Feminine sex-typed interviewee

Performance Orientation

Leaders with a performance orientation focused on work achievements in the conventional sense. In other words, they keep their "eye on the prize." They prioritize delivering results by having constructive relationships with colleagues, building a high-performance company culture, and allocating resources to achieve targets and outperform the market.

"No one looked at the clock. When the milestone was met, it gave me huge confidence." – androgynous (female) interviewee

Negative team dynamics were more top of mind of these leaders; they felt they were set up to fail because of "bad actors" who had political motivations or were weak performers. These bad actors needed "to be dealt with" urgently because they were causing extreme distress and anxiety. They also felt "held" back by remote work because it made it harder to build networks and leverage relationships that helped them be effective. Cases covered fights with colleagues, firing poor performers, and frustrations with a new or resistant leader or board. Leaders with a performance orientation feel frustrated by poor performers or weaker players who hold the team back from success.

"Sometimes, it is good to have blood in the water. We are all working better because of the fights." – masculine sex-reversed interviewee

Androgynous leaders rationalized that it was in the group's best interest to manage poor performers due to their group performance orientation.

"If it's right for the business, then that's what we have to do." - Androgynous (female) interviewee

Masculine leaders were not as conflicted about letting them go due to their individual performance orientation.

"Typically, you have a plan A and Plan B. Now, we had a plan C and D. So, with every deal, we asked 'if this person doesn't happen (because they are out due to COVID-19 or poor performance), who can replace that person and what kind of knowledge or expertise, does he have? I really had to have three levels of backups.'" - Masculine sex-reversed interviewee

Potential Contributions

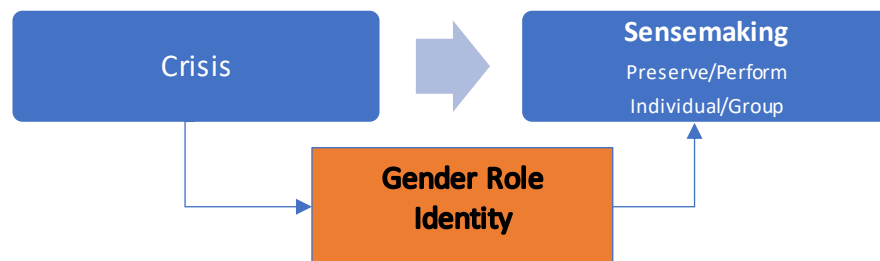
Research Implications

This study addresses several gaps in extant literature. First, at a theoretical level, we enhance sensemaking literature with a more specific use case of identity, specifically gender role identity. Second, gender role identity can and should be factored into all leadership studies, especially when selecting population samples, not biological sex. In this study, we build on the concept of gender role identity to nuance the explanation of gender in sensemaking literature.

The phase 1 study led us to several propositions that we studied in the follow-up phase of interviews (June-July 2021) with a broader set of leaders using a theories-in-use approach to refine and validate the leader sensemaking framework on preserve-perform orientation. By theoretically sampling cases based on their gender role identity scores, we have discovered differences in how leaders with different gender role identities make sense during a crisis along two dimensions: preserve versus perform orientation and individual versus group orientation. This section discusses the preliminary hypotheses that future studies can test with a larger sample of leaders and other crisis contexts.

We propose that gender role identity, measurable using the BSRI study, is a better predictor than biological sex in how leaders make sense in a crisis. Based on the theory elaboration structuring method, we propose a direct relationship between crisis and leader sensemaking with gender role identity context as a mediator. Since there is no connection between these three variables in the extant literature, this study could open a whole new set of questions around gender role identity and sensemaking in any context, crisis or not.

Figure 8: Research Model – Relationship between Gender Role Identity and Sensemaking with Crisis as a Mediator



We propose that masculine leaders focus more on individual preservation and performance goals and resources than feminine leaders. We also propose that androgynous leaders focus more on group performance goals and resources.

P1: Gender role identity is more relevant than biological sex in how leaders sensemake crises.

1(a) Masculine and feminine leaders make sense of crises more similarly than female or male leaders of distinct gender role identities.

1(b) Androgynous leaders make more sense of crises similarly, regardless of their biological gender.

P2: Leaders with different gender role identities approach sensemaking in a crisis differently

2(a) In a crisis, androgynous (both male and female) leaders have group and performance orientations.

2(b) In a crisis, masculine leaders (both male and female) have an individual sensemaking orientation.

2(c) In a crisis, feminine leaders (both male and female) have a group sensemaking orientation.

Managerial Implications

As a full-time executive in an organization during the COVID-19 pandemic, I find myself in a unique position to study and practice leadership in a crisis. The motivation of this study is to

bridge the gap between academics and practitioners when it comes to identifying and enabling leaders to navigate crises more effectively. Practitioners need better guidance on how to form teams to handle crises and select and support leaders in a crisis. Practitioners also need to become aware of how they and their peers make sense of situations. This study and its model aim to elaborate on existing sensemaking theory to be more practically relevant and actionable for leaders in crisis. Our study will help organizations better prepare for future crises and disruptions and improve leadership effectiveness by incorporating gender role identity and sensemaking capabilities into their leadership development programs.

While there have been many examples of outstanding leadership highlighted in the media over the last 24 months, there is a lack of clarity about what makes Jacinda Ardern a more effective leader than others. Gender, therefore, becomes the most apparent but incomplete explanation. The answer to the question "is gender relevant on how leaders make sense of crisis?" is explored via this research.

The end goal of this study is to make crisis management literature more robust by adding a gender role identity lens to sensemaking. The managerial implications are that organizations can be better prepared to deal with future crises and disruptions and improve leadership effectiveness by incorporating gender role identity and sensemaking capabilities into their leadership criteria and conversations. One interviewee who aptly summarized the managerial implications and contribution of this study:

"I really believe the study that you're doing is probably something that's required to be brought out. As we go forward, as we evolve in the new scenario that we're in, I think it will

become more important to have gender role traits than just purely gender stereotype traits. If you're a leader in today's world and you're talking about remote working, it will probably be important to have those traits of compassion, empathy, and so on. If we're going to revert to the gender stereotypes compared to the gender role traits, that would probably be a difficult proposition going forward, especially with what's happening in the world now with people dealing with personal and professional crises. So as organizations look to evaluate and hire leaders, how they will respond to crises will be an important trait to start considering.”

Another contribution of our research is the development of contemporary case studies based on actual leader interviews, which can be used for leadership workshops to raise awareness of gender role identity as a concept and how it impacts leaders' sensemaking. Combined with the BSRI survey, these case studies allow workshop participants to react to how leaders make sense of COVID and non-COVID crises. In October 2021, we piloted our workshop with a group of 53 graduate students as part of their Strategic Leadership Course at the University of Virginia McIntire School of Commerce MS Global Commerce program in Charlottesville, Virginia.

The objectives of the workshop were threefold:

1. Overview of Sensemaking and Gender Role Identity
2. Applied sensemaking through crisis case studies
3. Generate awareness of self and other gender role identities and how that impacts shared sensemaking in a crisis

The workshop format and feedback are discussed in Appendix II.

Limitations

There are several limitations to this study. First, we interviewed twenty leaders across industries, which worked for theoretical saturation. While this helped develop a preliminary understanding, we would need more data across more leaders to test whether gender role identity can predict sensemaking in crisis. Second, additional variables to research came up in our interviews to include in future studies. These variables include gender stereotypes (self and others), and seniority and culture (hierarchy, norms, role models) played a role in responding to a crisis. For example, some male leaders felt compelled to behave in a certain way because of perceived expectations at work and home. Since gender stereotypes and organizational culture are both vast and well-established constructs in management literature, it deserves separate and closer attention. Finally, when using the BSRI survey in practitioner (vs academic) workshops, the terminology of masculine, feminine and androgynous leaders tends to confuse and alienate some participants. In future research studies, we may want to simplify gender role identity types with easily understood terminology. To engage in a discussion around diversity, we must make it as inclusive and non-patronizing as possible for participants to engage in a dialogue. An alternative approach is to apply some creative personas to help managers identify better with their gender identity. These personas, based on the gender role identities, are adopted by both male and female leaders in a crisis:

The Fearless Hero: Based on our sample of six masculine leaders (3 male and three female), we found that these "Fearless Heroes" are the protagonists or heroes of their stories. They see a

crisis as a problem to be solved, with them playing an active role in “putting out the fires.” They ask first: “what does this mean for me?” and “what do I need to do?” They have high expectations of themselves to act quickly and decisively. They are committed to pulling out all stops to ensure things are in their control, even if it means taking on more work or learning new skills. They also share less of their challenges with the group. For example, masculine leaders made statements like:

“When you enter the room, the responsibility of a solution is yours.”

“I am a hands-on worker; I put in the extra hours. I couldn’t do everything, but whatever I could rescue, I did.”

The Resourceful Producer: Based on our sample of six feminine leaders (3 female and three male), we found that these “Resourceful Producers” view their teams and peers as actors in a play they produce. They do not expect to have the answers but seek solutions for the group by asking, “Who can help?” They engage with the group to identify solutions and assign roles depending on their relative capabilities and not pre-crisis identities. One feminine leader shared:

“I get my energy from the work-family I have (4-5 of us). It is what we have built together, we all have an opinion and voice, and we have gained each other’s respect. I think how I can bridge the gap, what can we do.”

The Team Captain: Based on our sample of seven androgynous leaders (4 male and three female), we found that these “Team Captains” focus on making the team win, no matter the

odds or adversity. They prioritize results by having constructive relationships with colleagues, building a high-performance company culture, and allocating resources to achieve targets and outperform the market. Androgynous leaders manage complex team dynamics and swiftly manage out “bad actors” who either have political motivations or are weak performers. These bad actors needed “to be dealt with” urgently because they cause extreme distress and anxiety. In our study, androgynous leaders said the following things:

“No one looked at the clock. When the milestone was met, it gave me huge confidence.”

“If it’s right for the business, then that’s what we have to do.”

Conclusion

Fearless Heroes (masculine), Resourceful Producers (feminine), and Team Captains (androgynous) each pay attention to different aspects in a crisis, regardless of their sex. Fearless Heroes “run towards the fire”; they may be best when time and resources are scarce, and group survival depends on quick decision making. Resourceful Producers “first put on the toolbelt”; they are valuable when the crisis is complex, and the root cause may not be clear, so they need to tap into the group’s expertise. They are also good at putting preventative measures and backup plans to prepare for future crises. Team Captains “keep their eye on the prize”; they are valuable when the business needs to balance lives with livelihoods, and the business's survival through the crisis is paramount. Organizations can better prepare for future crises and disruptions and improve leadership effectiveness by incorporating these gender role identities into their leadership criteria and crisis scenario planning.

Appendix O: Reviewed articles by construct

Authors(s) and year	Construct	No of Citations
Bem (1974)	Gender and Identity	13163
Weick, Sutcliffe and Obstfeld (2005)	Sensemaking and Identity	7583
Gioia and Chittipeddi (1991)	Sensemaking, Change, Qual	4675
Schein (1973)	Gender and Leadership	2212
Eagly, Karau and Makhijani (1995)	Gender and leadership	1916
Snow and Anderson (1987)	Identity	1865
Balogun and Johnson (2004)	Sensemaking, Change, Qual	1780
Lüscher and Lewis (2008)	Sensemaking, Change, Qual	1231
Ibarra and Barbulescu (2010)	Identity and Sensemaking	1047
Balogun and Johnson (2005)	Sensemaking and Change	973
Powell, Butterfield and Parent (2002)	Gender and Identity	936
Maitlis and Sonenshein (2010)	Sensemaking, Crisis, Identity	909
Ryan and Haslam (2008)	Gender and Crisis	585
Ryan and Haslam (2011)	Gender and Crisis	490
Sandberg and Tsoukas (2015)	Sensemaking, Crisis, Identity	459
Helms-Mills, Thurlow and Mills (2010)	Sensemaking and Identity	389
Brown, Colville and Pye (2015)	Sensemaking, Identity and Change	380
Kark, Waismel-Manor, Shamir (2012)	Gender and Identity	287
Sabharwal (2015)	Gender and Leadership	277
The Lehman Sisters Hypothesis (2012)	Gender and Crisis	174
Maitlis and Christianson (2014)	Sensemaking, Crisis, Identity	150
Embry, Padgett, Caldwell (2008)	Gender and Identity	143

Lifshitz-Assaf (2018)	Identity	117
Hadley, Pittinsky, Sommer, and Zhu (2011)	Crisis and Leadership	94
Weick (2015)	Sensemaking and Ambiguity	85
Cuadrado, García-Ael and Molero (2015)	Gender and Identity	84
Gartzia and Van Engen (2012)	Gender and Identity	82
Kniffin, Narayanan, Anseel, Antonakis, Ashford, Bakker, Bamberger (2020)	Crisis and Leadership	80
Nathan (2004)	Sensemaking and Crisis	52
Sheaffer, Bogler and Sarfaty (2011)	Gender and Crisis	51
Wolfram and Gratton (2014)	Gender and Identity	50
Dubrin (2013)	Crisis and Leadership	43
Zabrodzka, Ellwood, Zaeemdar, and Mudrak (2016)	Sensemaking and Identity	42
Gilstrap, Gilstrap, Holderby and Valera (2016)	Sensemaking and Crisis	41
Stephens, Jahn, Fox, Charoensap-Kelly, Mitra, Sutton, Waters, Xie, Meisenbach (2020)	Sensemaking and Crisis	40
Powell (1982)	Gender and Identity	30
Sandberg and Tsoukas (2020)	Sensemaking	27
Esser, Kahrens, Mouzughy, and Eomois (2018)	Gender and Identity	25
Hennekam and Shymko (2020)	Gender, Crisis, and Sensemaking	11
Jonsdottir, Singh, Terjesen, and Vinnicombe (2015)	Gender, Identity, Crisis	10
Kwame and Anambane (2019)	Gender and Entrepreneurship	8
Christianson and Barton (2021)	Sensemaking and Crisis	5
Hougaard, Carter, and Mohan (2020)	Crisis	5

Glynn and Watkiss (2020)	Sensemaking	4
Weick (2020)	Sensemaking	2
Kessler (2020)	Crisis	2
Gannouni and Ramboarison-Lalao (2019)	Gender and Identity	1
Ancona, Williams, and Gerlach (2020)	Sensemaking and Leadership	1
Sims, Carter, Gong, and Hughes (2019)	Sex and Identity	0
Tsoukas, Patriotta, Sutcliffe,, and Maitlis (2020)	Pre Sensemaking	0
Kaffka and Krueger (2021)	Sensemaking and Entrepreneurship	0
Kamble and Mulla (2019)	Identity and Crisis	0

Appendix I. Research Questions Evoked by the Pandemic

(Source: Stephens et al. "Collective sensemaking around COVID-19: experiences, concerns, and agendas for our rapidly changing organizational lives." Management Communication Quarterly 34, no. 3 (2020): 426-457.)

1. How is our global organizational society and discourse influenced by and influencing adaptations to pandemic-related uncertainty?
2. How will pandemic-influenced work-life practices interact with intersecting identities (e.g., gender, race, class, age, ability, virus exposure status)?
3. How will organizational policies on issues like bring-your-own-device (BYOD) to work, cyberbullying, cybersecurity, and telework be altered, articulated, experienced, and evaluated?
4. How are organizations making decisions and disseminating them to stakeholders?
5. How are we (re)organizing and being organized amidst this pandemic?
6. When society communicates through lean media, how will new practices influence problem-solving, creativity, teamwork, adaptability, coaching, discrimination, and emotional intelligence?
7. How can organizations serving vulnerable populations better meet their stakeholders' needs for information, services, and social inclusion during COVID-19?
8. How will organizations' new practices (dis)empower stakeholders?

9. How will organizations and their stakeholders make sense of issues around surveillance, tracking, and privacy changes in response to COVID-19?

10. How might changes in people's perceptions about in-person versus mediated interaction affect organizational communication and culture?

11. How do communication, and decision overload affect us in a time when we want more information, but that information is also stressful?

12. What new groups and practices are forming? And how are those groups and practices governed, expanded, and then stabilized or abandoned after the crisis stages of the pandemic?

13. How will disaster preparedness and resilience change now that our societies have experienced COVID-19?

14. To what extent and how do the narratives or messages from organizational leaders during this pandemic affect their employees' organizational identification, job satisfaction, and turnover intentions?

15. When people return to their physical places of work after weeks or months of work from home, will they go through a re-socialization process, and how?

16. In an era of hiring freezes, how do employees cope with unemployment or negotiate a potentially higher workload?

17. How will the norms, rituals, and terminology used during virtual work influence post-COVID-19 work?

18. To what extent will telehealth become a more prevalent option, even covered by insurance, now that many healthcare organizations have demonstrated its feasibility?
19. How will stakeholders assess the communication practices that organizations manifested during COVID-19?
20. How are people experiencing and resisting intersecting COVID-19 related stigmas?
21. How are powerful and embodied experiences like grief, rage, and precariousness part of sensemaking after a cosmology event?
22. What new knowledge do we gain by studying self-organizing support groups (ranging from mental health to parenting support) that formed in response to COVID-19?
23. How does institutional trust (or lack thereof) shape the study of organizations and crisis response?
24. How do people sensemake around labels of essential and nonessential work?

Appendix II: Crisis Workshop Details

We held two sessions with the students. The first 30-minute session was to introduce and discuss COVID-19 in the context of strategic leadership. The second 90-minute session was a case study discussion. We sent the following articles as a pre-read:

- Session 1: Kniffin, Kevin M., Jayanth Narayanan, Frederik Anseel, John Antonakis, Susan J. Ashford, Arnold B. Bakker, Peter Bamberger, et al. "COVID-19 and the Workplace: Implications, Issues, and Insights for Future Research and Action." (2020)
- Session 2: Ancona, Deborah, Michele Williams, and Gisela Gerlach. "The Overlooked Key to Leading Through Chaos." MIT Sloan Management Review (2020).

At the end of the first session, the students had to complete the same BSRI survey shared with the survey respondents from our research study. Over the next week, we collected and calculated the student A-scores and assigned them to groups for the follow-up 90 minutes workshop based on their gender or gender role identity. The groups were sat together in a classroom and given two of the six case studies discussed in the data analysis section.

	<i>Group Size</i>	<i>Group Composition (based on BSRI Survey)</i>	<i>Cases Assigned</i>
<i>Group AF</i>	<i>6</i>	<i>Androgynous Females</i>	<i>Van Sarna, Res Seth</i>
<i>Group MT</i>	<i>6</i>	<i>Masculine Males</i>	<i>Apurva Saber, Phun Baru</i>
<i>Group MT2</i>	<i>6</i>	<i>Masculine Males</i>	<i>Van Sarna, Res Seth</i>
<i>Group MR</i>	<i>6</i>	<i>Masculine Females</i>	<i>Apurva Saber, Phun Baru</i>
<i>Group Y</i>	<i>5</i>	<i>Feminine Mixed</i>	<i>Van Sarna, Res Seth</i>

<i>Group X</i>	<i>6</i>	<i>Masculine Mixed</i>	<i>Apurva Saber, Phun Baru</i>
<i>Group A</i>	<i>6</i>	<i>Androgynous Mixed</i>	<i>Alex Kig, Ash Kimpo</i>
<i>Group B</i>	<i>6</i>	<i>Males</i>	<i>Alex Kig, Ash Kimpo</i>
<i>Group G</i>	<i>6</i>	<i>Females</i>	<i>Alex Kig, Ash Kimpo</i>
	<i>53</i>		

During the 90 minute workshop, we asked the following questions to understand what the students considered to be the most important aspects of the cases and how they perceived the leaders:

- *If you were <name of persona>, how would you make sense of the situation?*
- *What was your interpretation of the incidents? What did you consider most important?*

The class discussion highlighted that the groups of similar gender role identities had more consensus than the mixed groups. At the end of the workshop, we revealed the student gender role identities to connect the dots to understand why there were similarities and differences amongst their reactions to the cases. The workshop received positive feedback and suggestions to improve from the faculty sponsor to incorporate into future workshops with actual managers:

Strengths

“The students seemed engaged and earnest in their comments and very interested in the reveal at the end.”

“The group arrangements you used seemed to generate some differences in comments between groups.”

“The cases were interesting and timely.”

“You showed great interest in their comments through your responses and follow-up questions.”

“Your interest in the topic and enthusiasm for academic research was great for them to see, and you gave a nice pep talk to them at the end!”

Suggestions for Improvement:

“Having one “sample” case at the beginning where you answer the two questions might have helped the students be clear on what you meant by “how would you make sense of the situation? What was your interpretation of the incidents? What did you consider most important?”

“Setting a timer for when groups should switch to the second case could help make sure both cases get sufficient attention.”

“Always calling on groups from left to right meant that the far-right seated groups ended up not saying as much – could reverse order and go left to right for the second case in each pair.”

“It was hard to evaluate how much of the differences in comments between groups were due to groups collectively reaching a different sensemaking outcome or just differences in the way the student(s) who spoke for the group explained their views. Plus, once the first group on the left had spoken, there was a tendency for the next two groups to reiterate or answer similarly.”

“Instead of posing two open-ended questions for each case, I wonder if it would work to ask groups first to consider a) one very clear cut decision (e.g., pick which factor should be the protagonists’ top priority a), b), c), d) or how much of a salary cut is appropriate (%) and then b) one or more open-ended questions. For the clear-cut decision question, we could even ask for a show of hands from the whole class at once to see if the response patterns were visibly different before opening the discussion for the open-ended question(s).”

“I wonder about experimenting with other arrangements of cases and groups in the future to fine-tune the best class format, such as a) having 3 cases and more extended discussion on each vs 6 cases and shorter discussion for each or b) having the same six cases but mixing up which groups cover which cases rather than having the same three groups focused on the same pair of cases (e.g., first three cases same as yesterday by the rear, middle, back and then next three cases by left, centre, right)

“What would happen if you did the reveal after discussing the 3 cases (with all groups having a turn) and then did the discussion of the next 3 cases after the reveal when they knew their gender role categorization and the meaning of their group assignment?”

“I think the reveal at the end was a bit overwhelming for the class since the category names are a bit hard to figure, out and you only verbally described how their gender role categorizations mapped to their assigned case groups. Perhaps you could add a bit more detail in three steps. First, show how you scored the survey to generate the gender role categorizations (the +/- calculation you described to me. Then, a slide showing their gender role categorizations by email address but with a sentence/bullet fully describing the meaning of each category title.

Third, having a diagram showing the relationship between their categorizations and the groups you formed.”

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