

Sensemaking of COVIDian Crisis for Work and Organization

Shradha Kundra¹ · Rohit Dwivedi¹

Received: 17 November 2021 / Accepted: 20 July 2022 / Published online: 19 August 2022 © The Author(s), under exclusive licence to Springer Nature Switzerland AG 2022

Abstract

COVID19 pandemic is pushing business organizations to cope in newer, more resilient ways. In this study, in-depth qualitative research was conducted using Weick's sensemaking framework (1995) to give organizational leaders a snapshot of how individuals grappled with sensemaking during this time. The enactment of sensemaking for individuals occurred based on four major COVIDian realities: life during the lockdown, work from home, moments of reflection, and struggles and emotions. The implications of the findings are two folds. First, the dynamic nature of extracted cues coupled with greater technology use increased enactment frequency amongst individuals leading to a collapse in sensemaking. Secondly, we propose that this collapse has a significant impact on human cognition, which will further affect the nature of work as well as the meaning of work in life.

Keywords COVID19 · Sensemaking · Qualitative study · Lockdown · India · Collapse of sensemaking

Background

The Absurdity of the Pandemic Times

The irrationality of human action gets amplified during a crisis. At the same time, decisions often have to be made at random with a gut feeling while there is no time for rational calculations. The COVID19 pandemic plunged us into such absurdities. During the first wave of COVID19 infections in India, medical and policing services personnel who were doing their jobs were celebrated as "COVID warriors," and those who were forced to travel back home to sustain and survive the lockdown conditions without their daily wages were ridiculed as 'COVIDiots' and super spreaders. During the second wave of COVID19 infections in India, the healthcare system was strained beyond its capacity leading to a lack of oxygen supply and hospital beds. A senior doctor who was also one of our participants narrated, "People were treated on a first cum first serve basis circumstantially prioritizing the urban population over

Rohit Dwivedi rd@iimshillong.ac.in



Shradha Kundra shradha.fpm17@iimshillong.ac.in

Indian Institute of Management Shillong, Shillong 793014, India

the rural since medical facilities equipped to handle such cases could not be developed in those areas. Additionally, younger patients were prioritized over older ones since they were assumed to have better survival chances". While social distancing was considered a civic duty, it was also a luxury inaccessible to the underprivileged living in dense sub-urban conditions. The pandemic illuminated glaring inequalities prevalent in our society that go unnoticed during times of normalcy and are seldom questioned during regular times. Even during such prior times, in his book 'The Plague', Camus (1991) argued that suffering is randomly distributed, has no preordained design, and is simply absurd. Camus (1972) likened the human condition to Sisyphus, who was condemned to rolling a boulder up the hill in times of absurdity. Sisyphus reminded us to live and perform our duty despite being subsumed by a reality transcending our intelligence and scientific understanding. Therefore, sensemaking efforts during a crisis are often confronted by ontological distress (Kročil et al. 2021) due to upending of mundanity.

Furthermore, it can be contended that disruption in normalcy pushes individuals into an active sensemaking zone (Ancona 2012), which affects their work and life. Sensemaking is active during a surprise event or a crisis. The cues extracted from the environment during this time are unpredictable and unprecedented, thereby initiating an active sensemaking cycle. It occurs when individuals are attempting to respond to increasing levels of uncertainty (Weick 1995). Pascale (1978) asserted that the eastern existential perspective drew from an understanding that individuals are organizations within themselves. The challenges you face 'in here' and 'out there' are not discrepant. Similarly, we are also disrupted when our organizational practices are disrupted (Segal 2014). This understanding of the interconnection between self and the work organization qualifies as a relevant context to carry out this study that investigates how individuals make sense of the change in their work and life during the COVID19 pandemic. The absurdities organizational management faces in the light of the COVID19 crisis are further disrupted order and complicated human coordination (Müller 2021a, b). Müller's study further elaborated on how it is imperative to take Camus' existential approach to deal with recurring as well as cascading crises (personal and professional) with which organizations are unwittingly confronted. The interconnectedness of the human condition induced by the pandemic has us firmly believe that making sense is grounded in existential philosophy. Moreover, the influence of existentialism on management and work has not been explored to its fullest potential (Mac-Millan et al. 2012). Therefore, we endeavored to understand how meaning was constructed when the sources from which we derived meaning were jolted during this crisis.

Literature Review

What is Sensemaking?

The variegated nature of sensemaking presents definitional challenges. Sensemaking is referred to as a "theory" by some scholars (Holt and Cornelissen 2014; Jensen et al. 2009; Stein 2004) while others have referred to sensemaking as a "lens" (Sonenshein 2009; Stensaker and Falkenberg 2007; Vough 2012) and still others referred to it as a "framework" (Mills et al. 2006; Mikkelsen 2013). Weick (1995), in his seminal book, describes the "sensemaking perspective" as a set of ideas that are changing and characteristic of a "paradigm" (Weick 1995, p.69). The central theme of sensemaking revolves around how people make sense of unequivocal inputs and enact the meaning back into the environment (Benner 1994). Donald Campbell (1965) developed a framework of social life that positioned sensemaking as a social exchange (enactment) between actors and their environment (ecological environment) where meaning is constructed (selection)



and preserved (preserved) (Weick et al. 2005). Sensemaking is an episodic process triggered by a planned/unplanned/ambiguous event that interrupts ongoing activities, causing disequilibrium and making people reflect and respond until equilibrium is satisfactorily achieved (Weick 1978, 1995, 2009, 2010; Weick et al. 2005). Weick (1995) highlighted seven properties of sensemaking that are intertwined and contingent on each other. They are as follows: Identity construction: Individuals have unique identities grounded in their social hierarchy, occupation, gender, age, and other similar factors (Weick 1995). Social context: Sensemaking is a social process where individuals construct shared narratives Weick (1995). Retrospection: Individuals make sense of what is happening based on their past experiences, shaping how they interpret current events (Weick 1995). Ongoing experience: Sensemaking is not a state that is achieved but is always in progress (Weick 1995). Extracted cues: Cues from the environment help link points of reference to larger ideas that help form mental models to make individuals understand the unprecedented circumstances (Weick 1995). Enactment: When individuals perform a specific activity, their thoughts towards it change, thereby changing how they perform the activity and subtly making the act of sensemaking an action (Weick 1995). Plausibility: In sensemaking, accuracy is secondary. Given the multiplicity of interpreting "the" object through various lenses, multiple times, by various audiences, Weick believes accuracy is a doomed effort (Weick 1995). Sensemaking, done in retrospection, helps individuals recount past events, which are a mere reconstruction of what happened, and this means events never really occurred the way they are narrated. Finally, sensemaking buttresses itself on the understanding that meaning is not out there in the world, but sense makers continually construe it (Weick 1995). Therefore, sense makers are inventors, not merely interpreters (Weick 1995). Human beings are persistently searching for life's meaning, more so during an emergency or crisis that threatens the ontology of human existence, which the French philosopher Albert Camus described as 'the hour of consciousness.'

Sensemaking during Crisis

Crises shatter fundamental assumptions (Janoff-Bulman 2010) and trigger sensemaking about the event, the self, and often the world at large (Park 2010). Therefore, we believe existentialism allows for a coherent examination of individuals' constructed meaning when confronted with an all-pervasive trigger event.

Weick (1988), in his analysis of the Bhopal gas tragedy, building on Shrivastava's (1987) analysis, argued that during a crisis, people enacted the environment that constrained them. He stressed that to make sense of the crisis, we must examine people's interaction with each other and the trigger event. As seen in the past (Camus 2018), in times of a disease outbreak (which is the trigger event), distress and social friction experienced by communities while trying to inhibit the spread of the disease were as dire as the disease itself. The outbreak of the COVID19 pandemic was a trigger event that has caused a significant cascading impact on our everyday lived realities. It was a low probability/high consequence event that threatened human existence. The low probability of such an event has made interpretations arduous and promulgated severe demands on sensemaking. Few scholars in the past have emphasized the importance of trigger events. For example, in NASA (National Aeronautics and Space Administration), space shuttles shed foam on almost every flight. Initially, NASA had recorded potential dangers of foam shedding. Still, it was later classified from an 'in-flight anomaly' to an 'accepted risk,' which led to the normalizing of deviancy, a collapse in sensemaking, and an eventual disaster for



the Columbia mission (Dunbar and Garud 2009). Additionally, the Union Carbide plant in Bhopal witnessed a similar failure in paying attention to trigger events. The cues such as a pervasive odor, throbbing tank, vaporizing leak, high readings from the pressure gauge, were against the firm belief of the employees that a chemical reaction could not have taken place in the plant since it was closed for six weeks (Lapierre and Moro 2002; Weick 2010). The failure to engage in action culminated in an explosion that claimed thousands of lives. Risk signals and discrepant cues have emerged before a discrepancy has flared up into a crisis. Failure to recognize these indicators has worsened the crisis, as also argued by scholars who studied the Flint water crisis in the US using the sensemaking heuristic (Nowling and Seeger 2020).

Recently researchers have used the sensemaking perspective to understand the impact of the COVID19 crisis both at the micro and macro levels. At the societal level, Angeli and Montefusco (2020) highlighted the need for adopting complex thinking in policy decision-making. Stephens et al. (2020) discussed how collective sensemaking emerged in their research team because of the organizational and societal changes brought about by the pandemic. On the other hand, Markham et al. (2021) conducted an autoethnographic study to understand the implications of globally felt trauma in everyday lives at a micro and macro level. Christianson and Barton (2021) commented on how the context of the pandemic has complicated the process of sensemaking because the cues from the trigger event were novel, fast-paced, overwhelming, and unpredictable. These studies have overlooked the broader context in which sensemaking is embedded. We needed to address this glaring gap by investigating how the macro trigger event impacts micro-events, which are enacted back into the macro event and business organizations. This approach helps understand that when individuals were trying to make sense of the event, they were also engaged with its impact on their everyday work and life.

Research Objective To examine the phenomenon of sensemaking concerning work and life during the COVID19 lockdown 2020.

Methodology

Research Approach

An open-ended online survey questionnaire was designed and shared on both the authors' digital network and contacts, requesting to share it further within their network. This study followed a convenience-snowball sampling technique to gather responses using google forms (Lunneborg 2007). The survey received 742 responses. The design of the questionnaire was such that it had questions to capture the experience of working during the ongoing pandemic based on Weick's sensemaking properties (1995).

Research Procedure

The questionnaire was emailed to respondents on 8th April 2020 during the first phase of the national-level lockdown announced by the Indian Government on 25th March 2020. This stay-at-home order for about 1.3 billion people is one of the largest lockdowns. At this point, people had started adapting to disruption in their work and life. On the first day of sending the survey, we received about 243 responses. A total of 742 participants



responded in the subsequent days, out of which 627 were working professionals who were considered for the study. Respondents were eager to discuss the impact of COVID-19 on their everyday well-being, as it was already a part of their daily conversations. Due to the lockdown, they were keen to share their opinions, views, and personal hardships. For this study, we rejected the traditional use of validity frameworks which focuses on the realist assumption that there is a reality external to our perception. Instead, we used Lincoln and Guba's (1985) concept of trustworthiness to substantiate our findings. Guba (1981, p.90) warned that these concepts should only be used as fluid guidelines and not become the orthodox standard for conducting qualitative research. Therefore, to warrant methodological rigor, we performed member checks while coding and categorizing to ensure the credibility of our results, we also performed a negative case analysis to capture the diversity of voices and followed up on atypical responses via telephone conversations as is visible via inter narrative tensions exhibited in the quote excerpts. To ensure further trustworthiness, we performed peer debriefing wherein we collaborated with two subject matter experts to assess the methods and findings of the study. Upon their suggestion, we discussed our preliminary findings in a webinar with a group of 57 participants. As a consequence, participants in the discussion forum narrated their understanding of the crisis and the impact they feel the crisis has caused/ is likely to cause. Some of the prominent excerpts from the discussion are mentioned in the results.

Questionnaire Protocol

We devised a questionnaire protocol based on Weick's (1995) socio-psychological sensemaking properties. These properties are proposed to be used for disciplined imagination through observation giving researchers broad guidelines (Weick 1989) and not tacit rules which can be refined or tested. All these properties are interlinked and overlap the other (Table 1).

Respondent Profile

The demographic profile of the participants is such that 414 respondents (55.9%) were male, and 328 respondents (44.1%) were female. 16.9% of the respondents belonged to the age range of 56, and above, 14.8% of the respondents belonged to the age range 45–55, 14.9% of the respondents belonged to the age range of 35–44, 39.5% of the respondents belonged to the age range of 25–34, and 13.74% of the respondents belong to the age range of 18–24. Based on the education level, 200 (26.9%) respondents are graduates or less, 460 (62%) respondents are postgraduates, and 82 (11.1%) respondents are doctorates. 61.1% of the respondents were expected to work from home (WFH) during the lockdown. The research was conducted in line with the Helsinki Declaration (DoH, WMA 2013). Only participants who volunteered to be a part of the study were considered. Vulnerable groups and persons below the age of 18 were not considered in the study. Moreover, the well-being of participant was prioritized over the intention of this study.

Data Analysis

For data analysis, thematic coding was performed. The qualitative data is present in short paragraphs to particular questions floated in the google survey form. It is not in the form of lengthy



Table I Questionnaire brotoco	Table 1	Questionnaire	protoco
-------------------------------	---------	---------------	---------

Sl.No	Questionnaire		
1	Gender		
2	Location		
3	Age		
4	Educational qualification		
5	Living status		
6	What have you been missing in this lockdown period? And why		
7	What has been your biggest struggle during this unprecedented lockdown period?		
8	What is the dominant emotion, you have been mostly experiencing during the ongoing period?		
9	To what extent do you feel that the present COVIDian crisis would bring about any fundamental change in our work and life?		
10	What would you suggest as one change which needs to sustain beyond the global crisis?		
11	After crisis, and given an opportunity, what life choices would you like to make for yourself?		
12	Once the lockdown is lifted, what are you most anxious about? And why?		
13	How easy has it been for you to adapt to this way of life involving social distancing, selfquarantine and WFH?		
14	To what extent are you able to fulfil your professional/job requirements, during the lockdown period?		
15	To what extent, do you feel work pressure has been impacting your personal situation?		
16	To what extent, do you think you can maintain the level of personal effectiveness in your professional work while in this lockdown?		
17	Overall, how have you treated this lockdown, due to Covid-19?		
18	What new interest or hobby have you discovered during the ongoing prolonged times of social distancing and lockdown?		
19	How much time do you spend on social networking platforms every day and engage with the community virtually?		
20	In comparison to the normal working days, how has your overall time on the internet changed?		
21	Who should be held accountable for the spread of the COVID19 virus?		

interview transcripts present in conventional qualitative analysis. Initially, the data was inductively organized and structured instead of fitting into preconceived categories (Kramer and Crespy 2011). Thematic analysis (Strauss and Corbin 1998) was done for all 627 responses. Initially, one researcher independently performed a line-by-line coding procedure to generate open codes by identifying relevant phrases. The open codes were then grouped based on emerging patterns and congruity. Then, we followed an axial coding mechanism that related open codes with categories (Goulding 1999). Categories were then constructed by grouping codes that display analogous ideas/meanings. The second researcher, an expert in thematic analysis, reviewed the open codes, axial codes, and categories. We then tried to understand each other's perspectives and understanding of the literature, and we reached a consensus after which themes emerged from the data analysis. This activity also ensured intercoder reliability (Kurasaki 2000).



Results and Interpretations

Broad themes emerged from the data that indicated different COVIDian realities that individuals experienced based on their sensemaking carried out by extracting cues from their environment, forming perceptions based on their Identity and socialization, and enacting the perceptions in the form of responses. We examine participant responses through the sensemaking framework of enactment, selection, and retention.

COVIDian Reality 1: Work & Life during Lockdown

72.3% of the participants perceived the first lockdown as a break in normalcy and an opportunity to spend time with their families or pursue their professional or personal development hobbies. Yet, most participants said they were so consumed by work at home and professional jobs that they didn't have time or energy to do other things during the lockdown. 16.1% perceived the lockdown as confinement and felt depressed and isolated, and 11.6% felt neither of the above (question, 17). Interestingly respondents were more positive in their perception of the lockdown.

Mamta, a 34-year-old woman IT professional, said,

Quote 1: Life in lockdown is only work and work. We are working harder than ever. We are constantly assigned tasks. Besides, doing all the household chores takes up all my time. Looking after the child, their school-related activities are an added burden. Keeping them entertained in a confined space is very difficult."

On the other hand.

Muralidharan, a 55-year-old working man in a public sector undertaking (PSU), said,

Quote 2: "I had a nice time in the lockdown. It allowed us to spend time with the entire family. My daughter got married sometime back, and she, along with her husband, came home and spent time with us during the lockdown. It was very refreshing."

A few others spent their time with everyday chores like cooking and cleaning.

These quotes are indicative of inter-narrative tension. Inter narrative tension means both the respondents were speaking about a similar familial aspect that got impacted during the lockdown but their experiences were vastly different, therefore their sensemaking was contingent on these experiences which arose from their social identity as well as their gender roles.

Challenges in sensemaking The commonality of the focal event (i.e.) the COVID19 pandemic at such a large scale triggered contradistinctive sensemaking cycles, which means that while the trigger event has been a common occurrence in everybody's life, respondents' experiences varied drastically which led to the generation of vastly distinctive sensemaking cycles. The nature of sensemaking was so distinctive because it occurred in highly atomized environments (due to the lockdown) and inhibited the development of a shared mindset posing further challenges to the essence of sensemaking which is predominantly a social process.

Further, 71.7% of the respondents experienced increased social media usage for the lack of conventional social interaction ever since the lockdown orders were doled out.



There was an overdependence on digital platforms for basic needs like procuring groceries, engaging with work colleagues, socializing with friends and family, and entertainment. This confined human interaction to only digital screens.

Rajat, a 41-year-old man in a consulting firm, said,

Quote 3: "There is nothing much to do apart from work. I keep toggling between Instagram, Facebook, Twitter, WhatsApp. Apart from that, I have started watching a lot of news because I am trying to understand what this virus is all about. There are so many rumors and so much information on WhatsApp groups that it's difficult to understand what is genuine."

Vikas, another 56-year male respondent and a travel agent by profession, said,

Quote 4: "I have decided to take a digital detox once every week to recover from all the anxiety caused due to information overload. I have a travel agency, and I know my business will not take off for the next year. Things look very uncertain. I want normalcy to return, and there are some people still congregating and spreading the virus by roaming around so carelessly without masks. They shouldn't put other lives at risk."

Challenges in sensemaking: Sensemaking, an activity that generally happens face-face, was restricted to virtual platforms. Opinions, trends, and emotions were profoundly influenced and shaped by digital opinion-makers. Peer validation and gratification were severely confined to the digital space during the lockdown period—most of the activities that the participants indulged in highlight the effects of digital platforms. Therefore, the medium of sensemaking for individuals drastically changed and was restricted to electronic media. Restricting significant portions of human interaction and behavior to electronic media altered the fundamental nature of sensemaking. Additionally, in March–April 2020, there was a spike in fake news circulation in the form of doctored videos propagating communal xenophobia, fake diagnosis and treatment of COVID19, misleading tweets from celebrities, and fake information about the nature and spread of the virus (News18 2020). People predominantly made sense of their environment concerning this (mis)information based on cues generated at short intervals and often contradictory, restricting the process of sensemaking and constricting it within trigger traps.

COVIDian Reality 2: Work From Home (Wfh)

As a measure to cope with the lockdown conditions and seek execution of work routine coupled with the available technologies, WFH evolved as the neo-normal during the crisis, not realizing enough that it might permanently impact the nature of work for a lot of professions. Although this neo-normal completely ignored the impact on the minuscule number of jobs that could be performed while at home, the popular culture was made to believe it was true for all jobs and organizations. The online solutions, which were readily available to connect virtually, gave a big respite to those who could afford to switch to the work-from-home. Institutions ranging from schools to higher education, IT services, and medical consultations were the first to switch. While manufacturing, transport, and construction suffered from an even more severe crisis.

Ashima, a 29-old-year old Ph.D. young woman, from the discussion forum, said,



Quote 5: "I feel like I am doing distant learning for my Ph.D. program. It was a welcome change since this gave me an opportunity to stay with my mom, who is otherwise alone. We connect with the faculty members via zoom calls, and classes happen online. However, I miss the campus life, reading in the library, and interacting with all my peers."

Au contraire, Surana, a 38-year-old professional working in the manufacturing sector, said,

Quote 6: "The business is going into tremendous loss. We will never be able to recover from this, given the condition of the workforce. They all want to go back to their hometowns. If we have to retain them, we have to make a stay arrangement and bear the losses. Even after the lockdown lifts, I am not sure if there will be any demand in this period of stagnancy."

And Binayak, a 54-year-old respondent working with a famous print media house, said,

Quote 7: "Since I work for a newspaper and a stigma has been attached with newspaper during this pandemic, I feel the future of print is going to be very, very challenging. I might have to figure out a way to see what else I can do."

The above quotes reveal how the lockdown has negatively impacted the respondents' professional lives. The inter-narrative tension here indicated how a businessman had to bear losses during the lockdown while a professional working in the media industry felt threatened due to a stigma attached to newspapers around that time. The stigma was due to a general understanding that the virus was transmissible from different surfaces and objects, due to which people stopped ordering newspapers at home (GoNewsDesk 2020).

The disruption in normalcy made people' enact- in terms of thinking about change' based on extracted cues from their environment. While some individuals looked at it as an opportune time who wanted to make a personal decision for a change in their career, others wanted the system to adapt to changing times,

While Avinash, a 30-year-old respondent working in an e-commerce platform, said,

Quote 8: "There is too much reliance on a single source and comfort with the way of doing things which have made the world a skewed value/ supply chain. I don't want to be a part of this anymore. I'll have to look for better options in my career."

While Syed, a 41-year-old respondent working with SAP, from the discussion forum, said,

Quote 9: "The old nature of jobs is going to change. We must embrace technology, change our mindset in terms of new ways of work; hence there need to be new ways to measure your deliveries and productivity."

Such statements reflected the nature of assumptions that all kinds of jobs could be done from home. People believed modernity had translated all organizations into plug and play, operated and managed by the machine on their laps.

The option of WFH gave a hint, at least initially, that this option may bring the long-desired work-life balance. Since nothing could be thought of as better than getting paid by working from home, this pandemic-triggered lockdown helped the respondents realize the importance of work-life balance.



Aisha, a young 24-year-old MBA graduate, said,

Quote 10: "An understanding that things we did in the office can be done remotely as well. I'll do more WFH in the future...will help me achieve a work-life balance and spend time with family as well."

A considerable number of respondents opined on the importance of work-life balance. But very soon, the above assumptions saw themselves getting quashed, revealing the painful side of WFH.

Ajay, a 29-year-old IT professional, said,

Quote 11: "We worked less while we were physically present in the office. Now the clients are giving us unreasonable timelines. Every small mistake gets escalated, and all the work needs to happen parallelly. There is no distinction between weekdays and weekends anymore. No work-life balance too."

And, Rajesh, a 36-year-old HR executive, said,

Quote 12: " it is not working from home anymore. Work is so taxing that it feels like we are living at work."

WFH, and WFA (work from anywhere), may have been envisaged for long as one of the new normals, facilitated by digital technologies. Still, the lopsided interference with LIFE and efforts at supervision, converting themselves into "surveillance" of the employee behavior, even inside their homes, resulted in severing experiences of "zoom fatigue" and never-ending bombardment of work expectations.

Challenges in sensemaking Given the multiplicity of experiences with the confluence of work and life during the lockdown instigated by the COVID19 pandemic, individuals indulged in active sensemaking, which aided in the formation of strongly formed opinions. Firmly held assumptions about work were shattered, and the meaning of work seemed to have been altered. These narratives were created without nuance, generally formed through social interaction. The hindrance in sensemaking by individuals was overshadowed by popular narratives generated through famous business spokespersons or television and social media.

COVIDian Reality 3: Struggles and Emotions

The impact of COVID19 has caused a global effect on individuals' psyche, inducing mass hysteria, leading to severe psychiatric manifestations across different strata of society because of economic distress, loneliness, isolation, and anxiety about the infection and its associated stigma. The imposed lockdown has given rise to anxiety, stress, and depression amongst individuals (Dubey et al. 2020). It has also worsened the effects of loneliness as per the responses.

Participants expressed anxiety related to social media and news; "INFODEMIA." Amit, a 37-year-old businessman, said,

Quote 19: "Coping with a change in routine is difficult. I have difficulty sleeping in the night Information from social networking apps adds panic and gloom. I am all alone, so it gets a little overwhelming to handle everything."



Because of their socio-structural privilege, some individuals did not experience any hardships during the time and found it rather calming.

Sujata, a 54-year-old primary school teacher lady, said,

Quote 20: "There is no struggle I am facing; in fact, I am happy about spending time at home and doing things leisurely. I have enough time to rest and recuperate while my husband goes to work."

The importance of familial bonds resurfaced in the psyche of participants.

On the other hand, Ramesh, a 42-year-old man working in an FMCG company, said,

Quote 21: "I have to stay away from my family during this time. I am teared up every night thinking about them. I feel very lonely and sometimes get suicidal thoughts. I have to stay away from them because of work. Each passing day is difficult because of the loneliness."

While Siddharth, a 24-year-old male MBA student, said,

Quote 22: "I feel confined, and I realized that I am stuck in an abusive home of a relative. I can't travel anywhere else due to lockdown. I feel I am not able to move around freely. Feeling caged ".

The 'sensationalization' of this pandemic by the media has managed to instill panic in the minds of the news consumers aggravating emotional reactions.

Kavya, a 47-year-old professional woman, working in the essential services, said,

Quote 23: "I stay with elderly in-laws who are most vulnerable, so we have to take extra precautions. In the news we see, things are very grim. My family doesn't let me step out because they are scared, I might bring the virus home, but my work gives me meaning, and I fight with them and still go to work anyway, of course, while taking all the precautions and being extra.. extra.. extra.. extra.. careful."

Tabish, a 56-year-old doctor, said,

Quote 24: "One of my helper boys contracted COVID while delivering medicines to houses. There is a social stigma associated with the infection. He was not allowed to go back home since members of his neighborhood were scared, so we made him stay back in our organizational premises and looked after him."

These quotes indicate how fear and paranoia have seeped into the family and social structures based on people's extracted cues from news and social media. India was not only battling the COVID19 pandemic but a fake news epidemic as well (Sahoo 2020). Moreover, vilification of individuals for the spread of the COVID19 infection based on underlying communal intolerance, misinformation, and misreporting added to the 'INFODEMIA.'

In addition to the fear of infection, many individuals feared impending financial instability and economic slowdown.

Aron, a 39-year-old marketing manager, said,

Quote 25: "I wished to change my job before the lockdown was announced. Things look very uncertain now. Our organization has announced a salary cut for a few months to recover costs and this is only the beginning. I fear the market will slow down further in the coming months."

And, Meenakshi, a 34-year-old professional working in the transportation business, said,



Quote 26: "The business vertical has been shut down entirely. I just lost my job due to a financial crisis in my company. This whole process has been taxing. I just want this to end. If this is the scenario, I don't know how I will be able to provide for my family."

Due to global and national lockdowns, temporary payment losses have put millions of jobs at risk. According to the data shared by EPFO (Employees' Provident Fund Organization, India), 2.84 million people have withdrawn money from their provident fund, indicating losses in income, uncertainty due to economic crisis, and job insecurity. The unemployment rate in rural India is 22.72%. In comparison, the unemployment rate in urban India is 25.09% indicating one out of every four workers is unemployed in rural India (Nanda 2020), which only hints at the level of anxiety this section of the population had to survive.

Challenges in sensemaking Most participants experienced a heightened sense of negative emotions due to uncertainty about their health and economic situation. Negative emotions are a strong trigger for sensemaking. Negativity bias (Rozin and Royzman 2001) and loss aversion (Tversky and Kahneman 1992) made individuals focus on negative emotions. Intense negative emotions (panic and rage) led to the forestalling of sensemaking processes because they tended to interrupt thought processes. The negative emotions consumed cognitive capacity and redirected attention from the trigger event to the emotion itself.

COVIDian Reality 4: Moments of Reflection

This disruption in every aspect of human lives made individuals engage in an 'active sensemaking' process (Weick 1993). As a result of active sensemaking, during the COV-IDian times, individuals engaged with sensible enactment expressing a willingness to bring change and see change based on extracted cues from their environment.

A large number of respondents perceived a heightened sense of environmental awareness within themselves. Yamini, a 37-year-old female respondent working in the IT sector, said,

Quote 13: "I have come to realize that mass-producing industries and factories cause unnecessary pollution and strain and have done worse for climate change; at least on a personal level, I want to adopt environmentally sustainable practices. I am trying to adopt a vegan diet because I have seen many documentaries, and I can see how meat industries and dairy farming are bad for the environment."

Participants also realized the importance of minimalism while experiencing shortages in grocery and general supplies and a sudden break in compulsive buying during the lockdown.

Kshitij, a 42-year-old male doctor, from the discussion forum, said,

Quote 14: "Money can't buy happiness. It's very evident now. The pollution in the air and rivers have reduced because we are going out less and we are purchasing less. This consumption pattern, which has developed, is harmful to my bank account and the environment—time to make a change. So, I will purchase only essential items in the future. It's funny to see how the entire "economy" is collapsing when people are buying only what they need."

The lockdown due to COVID19 made some others rethink the importance of specific human values.



Pratibha, a 43-year-old homemaker, said,

Quote 15: "The virus has affected all of us irrespective of race or religion; we have to stand united, single person, community, or country can't fight it alone. I would want the world to be more compassionate and kinder. I will also try to be generous wherever I can."

Many participants felt the need to give more time and attention to their friends and families, which they take for granted as their work-life hogs all the attention.

Radhika, a 29-year-old financial consultant, said,

Quote 16: "Video calls with my friends and family is not a luxury but a necessity to keep my sanity in check. I really look forward to that. Apart from this, I am spending quality time with my little daughter, which wouldn't usually be possible. I am glad in a way that we got this time, and this has made me realize how much attention kids need from their parents."

Some participants emphasized the importance of inclusivity and sensitivity. Maanay, a 35-year-old respondent working in the manufacturing sector, said,

Quote 17: "It's now important for us to understand that the rich live off the poor, and the rich must constantly respect and do the needful for the poor."

Dheeraj, a 60-year-old retired professional, said,

Quote 18: "We must follow scientific advice, think rationally, don't fall victim to petty politics, end hatred, value, and respect each human being. This crisis teaches us a lesson that everything perishable & short-lived."

Most participants, especially in the discussion forum, believed that the pandemic helped them realize the importance of relationships with their friends and family. Participants also thought that we could only overcome this crisis as a community by practicing biospheric and altruistic values. Contrary to these grand narratives, 58.6% of the respondents felt individuals should be held accountable for spreading the virus (question, 21).

Challenges in sensemaking The altruism of the individuals was reflective in abstraction; at the micro-level, they were subsumed by the care and fear of their in-group (themselves and their families). There was a greater feeling of separation from the outgroups. The inability to form a cogent narrative considering the micro and macro-level perspectives indicated a collapse in the sensemaking process.

The diagram below illustrates how the collapse of sensemaking has occurred at different stages (Fig. 1).

Discussion of Findings

The outbreak of COVID19 and enactment of this trigger have given rise to multiple crises for individuals personally and professionally based on their social context, constructed identity, and the cues they extract from their environment. Although there was an overarching trigger event in everyone's life, the impact of the event and its manifestation into crises vary drastically for affected individuals based on their subjective social realities. The



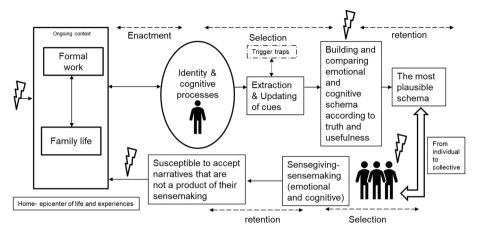


Fig. 1 Collapse of sensemaking

disparate experience of the same trigger event puts constraints in the generation of a coherent narrative building without socialization. Given the novelty of the scenario, individuals received discrepant cues about the COVID19 infection and its various social ramifications through digital and television media within a short time span, which were often contradictory and spurious. The velociousness with which disparate cues were generated restricted individual sensemaking to trigger traps, impeding the process of sensemaking in its entirety. Moreover, individuals experienced extreme negative emotions like anxiety, depression, helplessness, and worry during the initial phase of the lockdown. While emotional experiences can coax people into active sensemaking, the experience of extreme negative emotions can cause a significant impediment in sensemaking (Maitlis et al. 2013). Further, this is clearly seen in the inability of 'individuals' sensemaking to be coherent at the concrete and the abstract level.

All the above deductions indicated an impediment in sensemaking and suggested a collapse in sensemaking of the participants. This collapse in sensemaking has resulted in mental health breakdown amongst youngsters and shutting away the inflow of cues from the environment. These enactment outcomes are likely to endanger further the already volatile social fabric that holds us together at the macro level. When workers come to work with a collapsed sensemaking frame, it can harm organizations and their functioning. Some of the dominant themes that have evolved out of the above are centered around how the human and the artificial coevolve; nature of work, working and work organizations restructure; and what work and life together mean.

Human and the Artificial

The crisis-triggered lockdown response moderated by digital hyper-connectedness during the COVID(ian) times was distinct and different from the previous pandemic crises, where the medium of information was limited to the actual social interactions people could have with each other. The extent of those interactions would have determined the available diversity of information and thus the plurality of sensemaking frames and enactments. Experience and manifestation of the pandemic would have remained very different across contexts – the epidemic of 1918 called the "Spanish flu" was popularly termed as the "Bombay Influenza" in



India (Mehta 2021). While during the present occasion, the volume of information about the nature of the crisis, virus, or its impact on all aspects of life – fake or real was exponentially higher although more or less with similar quest to make sense from, across different global contexts. COVID19 is the common name for the pandemic across continents. International politics, supply chain breakdowns, work from home, impact on gender, etc., were the only significant global discussions ignoring the contextual manifestations and struggles. While this may force initial cognitive and emotive hyperactivity, it may enable a capability of human cognition to remain focused on its immediate surroundings and pay more attention to details around them, allowing more "here-and-now" conditions. The need would be to ask how human cognition and consciousness would evolve when, beyond the internet and the digital, the "artificially intelligent" takes over the mundane and the routines of human activity. Through such intermittent times, not just the crisis per se shapes the uncertainty but triggers a void for human cognition to make sense. At the same time, it still needs to compete with an artificial entity. The human cognition may get "inoculated" to ignore the filth generated by the intended or unintended informational overloads and put the artificial to multitask and expend itself.

Nature of Work, Working, and Work Organizations

From being hunter-gatherer to modern times, the nature of work and working has mostly transformed the human condition. While creating large work organizations became necessary to sustain a living, they have reached a stage of being all-pervasive and intrusive to the human condition. Moderated by the nature of given technologies which shaped the nature of work, the nature of dependence that people developed with their work organizations also kept changing. While an army officer needed to essentially be committed to his platoon to be able to serve the nation to which he belonged, even by sacrificing his life could very well tomorrow be working for a company headquartered and owned by the "enemy" country only for better pay and career opportunity. With evolving technologies shaping the nature of work, even how different work gets structured also undergoes a radical shift, including the way organizations get shaped. The same organizations which were resistant to any idea of switching over their paper-full of routines claimed to do work "from anywhere."

Meaning of Work in Life

Modern times needed work to sustain life, and thus working became a necessity. The COVID19 pandemic seemed to have shaken up this assumption and has led the individuals to decide on the "great resignation" phenomena. At the same time, its gendered impact remains to be unfolded. As of now, the "resignation" remains directed towards the existing organizations. The meaning of life rests in the relationships one values has at least come to the forefront. The unpredictability of life and the importance of living to the fullest with that one loves are also responsible for shaping the nature of work that one would like to commit to.

Philosophical Grounding for Practitioners

The collapse of sensemaking experienced by individuals during the COVID19 lockdown in India indicated a heightened loss of meaning. There was significant disruption in the essential order for human activity during the lockdown. During this phase, the perceived loss of



meaning suggested an existential crisis experienced by individuals that may have long-term ramifications in organized work. According to Camus, the human condition is associated with the yearning to find order in chaos only to get silence in response, which he described as the absurdity of the human condition. During the lockdown, the universality of this precondition was further amplified, as it did during the bubonic plague (Camus 1991). While most existential philosophers offer a solution to the absurd by seeking an escape from it, Camus has redirected us to a way of living with these absurdities- the middle ground. For Camus, human nature recognizes value for life and should be the basis for any ethical action. Therefore, any collective action is possible when human solidarity lies in cocreating meaning. Co-creation of meaning is possible when the emphasis is on developing interpersonal relationships and encouraging open dialogue (Blomme 2014; Camus 2006). Unfortunately, our management practices have not caught up with the fast-paced adoption of artificial intelligence and machine learning coupled with the telework scenario. Therefore, any efforts to inject meaning or purpose into the organizational psyche given such a scenario will, at best, have a short-lived impact (Lewis, SHRM forum 2020). Apart from the American, Indian firms are also witnessing 'The great resignation,' wherein employees have left their jobs because they seem to recalculate personal and professional priorities and values (Shefali Anand, SHRM forum 2022). Indian managers must adopt philosophical approaches to grapple with these changes, especially eastern existential insights, which look at variability as a constant (Müller and Kubátová 2022). Managers and scholars from the east must use their indigenous philosophical inclinations and help employees rediscover the experience of being. Western management practices are representative of strength and determinism, which reduce people to their specific roles as opposed to eastern philosophies, which have focused on self-identity emerging from coexistence and interdependence of relationships around the self. Within eastern philosophies (like Taoism and Zen Buddhism), there is the acknowledgment that conditions such as uncertainty and ambiguity are existential, and dealing with existential knowledge can increase self-awareness and authenticity (Heine 2018).

Conclusion

While the real impact of the COVIDian crisis would be apparent only post-crisis, this is an attempt to understand some of the initial responses of participants from India. We hope this study raises some important questions to further our understanding of human behavior in management and society at large, especially in times of crisis. The world is growing smaller yet more complex with rapid and unpredictable shifts in the social, environmental, geopolitical, and technological fronts. Therefore, events that trigger loss of meaning in people will increase by a manifold. In such a scenario, acknowledging, accepting, and thriving with ambiguity will make people more resilient to a crisis. Every business organization is a sensemaking organism, making it essential for these organisms to realize human finitude within and outside the system. Such a realization will increase self-awareness, improve authenticity and facilitate resilience to crises in the future.

Future researchers can further expand this research by conducting a similar study and capturing identical data points from lockdown 2021 to compare and contrast behavioral patterns and responses. India was the worst-hit country by the COVID19 in 2021, and the pain people of the country have endured is unfathomable. A longitudinal study in this aspect would deepen the understanding and help in better sensemaking. While this research



focused on an overall holistic approach, the interaction effects of gender, age, and educational qualification will give better insights. Other demographics, such as the location of the participants and living status, may alter some perspectives. Theoretical models can be built to test the validity of these findings in different populations that can forge theories that stand the test of time and geography.

Declarations

Conflict of Interest There is no conflict of interest for the manuscript.

References

- Ancona, D. 2012. Framing and Acting in the Unknown. S. Snook, N. Nohria, & R. Khurana, the handbook for teaching leadership, 3–19.
- Angeli, F., and A. Montefusco. 2020. Sensemaking and learning during the Covid-19 pandemic: A complex adaptive systems perspective on policy decision-making. *World Development* 136: 105106.
- Benner, P. 1994. The role of articulation in understanding practice and experience as sources of knowledge in clinical nursing. *Philosophy in an age of pluralism: The philosophy of Charles Taylor in question*, 136–155.
- Blomme, R.J. 2014. The absurd organization: The insights of Albert Camus translated into management practices. In *Another state of mind: Perspectives from wisdom traditions on management and business*, ed. Blomme, R.J., and B. von Hoof, 161–174. Hampshire; New York: Palgrave Macmillan.
- Campbell, D.T. 1965. Variation and selective retention in socio-cultural evolution. Social Change in Developing Area.
- Camus, A. 1972. The Plague (La Peste) (S. Gilbert, Trans.) New York: NY. Vintage Books.
- Camus, A. 1991. Between Hell and Reason: Essays from the Resistance Newspaper Combat, 1944–1947. Wesleyan University Press.
- Camus, A. 2006. Neither victims nor executioners. In Camus at Combat: Writings 1944–1947, Transl. Arthur Goldhammer, ed. J. Lévi-Valensi, 255–276. Princeton: Princeton University Press.
- Camus, A. 2018. Dr. Bernard Rieux: In The Plague. In Doctors in Fiction, pp. 74-80. CRC Press.
- Christianson, M.K., and Barton, M.A. 2021. Sensemaking in the time of COVID-19. Journal of Management Studies 58 (2): 572–576.
- Dubey, S., Biswas, P., Ghosh, R., Chatterjee, S., Dubey, M. J., Chatterjee, S., ..., and Lavie, C. J. 2020. Psychosocial impact of COVID-19. *Diabetes & Metabolic Syndrome: Clinical Research & Reviews* 14(5): 779-788.
- Dunbar, R.L., and R. Garud. 2009. Distributed knowledge and indeterminate meaning: The case of the Columbia shuttle flight. *Organization Studies* 30 (4): 397–421.
- GoNewsDesk. 2020. https://www.gonewsindia.com/latest-news/news-and-politics/covid-19-terror-newsp aper-sales-down-by-80-11108. Accessed on 7/7/2022.
- Goulding, C. 1999. Grounded Theory: Some reflections on paradigm, procedures and misconceptions.
- Guba, E.G. 1981. Criteria for assessing the trustworthiness of naturalistic inquiries. *Ectj* 29 (2): 75–91.
- Heine, S. 2018. Zen Buddhism and Western literary modernism: Rhetoric of uncertainty. Buddhist Philosophy: A Comparative Approach, 145–163.
- Holt, R., and J. Cornelissen. 2014. Sensemaking revisited. Management Learning 45 (5): 525-539.
- Janoff-Bulman, R. 2010. Shattered assumptions. Simon and Schuster.
- Jensen, T.B., A. Kjærgaard, and P. Svejvig. 2009. Two perspectives on information system adaptation: Using institutional theory with sensemaking. *Journal of Information Technology* 24 (4): 343–353.
- Kramer, M.W., and D.A. Crespy. 2011. Communicating collaborative leadership. *The Leadership Quarterly* 22 (5): 1024–1037.
- Kročil, O., Müller, M., and Kubátová, J. 2021. In review. Vulnerable social enterprises: Sensemaking and lived experience of the COVID-19 crisis.
- Kurasaki, K.S. 2000. Intercoder reliability for validating conclusions drawn from open-ended interview data. *Field Methods* 12 (3): 179–194.
- Lapierre, D., and J. Moro. 2002. BOOK REVIEW] five past midnight in Bhopal. Onearth 24 (3): 37e9.



Lewis, SHRM forum. 2020. Link accessed on 4–2–2022. https://www.shrm.org/hr-today/news/hr-news/pages/hr-managers-rethink-their-work-coronavirus-pandemic.aspx.

Lincoln, Y.S., and E.G. Guba. 1985. Naturalistic inquiry. Sage.

Lunneborg, C.E. 2007. Convenience sample. The Blackwell Encyclopedia of Sociology.

MacMillan, S., A.R. Yue, and A.J. Mills. 2012. Both how and why: Considering existentialism as a philosophy of work and management. *Philosophy of Management* 11 (3): 27–46.

Maitlis, S., T.J. Vogus, and T.B. Lawrence. 2013. Sensemaking and emotion in organizations. Organizational Psychology Review 3 (3): 222–247.

Markham, A.N., A. Harris, and M.E. Luka. 2021. Massive and microscopic sensemaking during COVID-19 times. *Qualitative Inquiry* 27 (7): 759–766.

Mehta. 2021. Link accessed on 1–3–2022. https://thelogicalindian.com/history/spanish-flu-in-india-the-ravage-it-caused-to-indians-28349.

Mikkelsen, E.N. 2013. A researcher's tale: How doing conflict research shapes research about conflict. *Qualitative Research in Organizations and Management: An International Journal* 8: 33–49.

Mills, J.H., T.G. Weatherbee, and S.R. Colwell. 2006. Ethnostatistics and sensemaking: Making sense of university and business school accreditation and rankings. *Organizational Research Methods* 9 (4): 491–515.

Müller, M. 2021a. Albert Camus and management: Opening the discussion on the contributions of his work. *Philosophy of Management* 20: 441–456.

Müller, M. 2021b. The value of work-related uncertainty: Changes from demands on certainty to finding ways of living in uncertainty. *Changing Societies & Personalities* 5 (3): 372–388.

Müller, M., and J. Kubátová. 2022. Existential values and insights in western and eastern management: Approaches to managerial self-development. *Philosophy of Management* 21 (2): 219–243.

Nanda. (2020). Link Accessed on 3–7–2020 Available at https://www.livemint.com/industry/human-resource/epfo-withdrawals-data-puts-spotlight-on-worsening-job-crisis-11590604480979.html.

News18. 2020. Link accessed on 7–3–2021. https://www.news18.com/news/buzz/muslims-spitting-on-food-hiding-in-mosques-to-spread-coronavirus-beware-of-these-8-fake-news-stories-2565483.html.

Nowling, W.D., and M.W. Seeger. 2020. Sensemaking and crisis revisited: The failure of sensemaking during the Flint water crisis. *Journal of Applied Communication Research* 48 (2): 270–289.

Park, C.L. 2010. Making sense of the meaning literature: An integrative review of meaning making and its effects on adjustment to stressful life events. *Psychological Bulletin* 136 (2): 257.

Pascale, R.T. 1978. Zen and the art of management. Harvard Business Review, March 1978, available from https://hbr.org/1978/03/zen-and-the-art-of-management. Accessed 14 Feb 2022.

Rozin, P., and E.B. Royzman. 2001. Negativity bias, negativity dominance, and contagion. *Personality and Social Psychology Review* 5 (4): 296–320.

Sahoo. 2020. Link accessed on 4–5–2021. https://www.orfonline.org/expert-speak/how-fake-news-complicating-india-war-against-covid19-66052/.

Segal, S. 2014. Business feel: Leading paradigm shifts in organisations. Springer.

Shefali Anand, SHRM forum. 2022. Link accessed on 4–2–2022. https://www.shrm.org/resourcesandtools/hr-topics/global-hr/pages/india-great-resignation.aspx.

Shrivastava, P. 1987. Preventing industrial crises: The challenges of Bhopal. *International Journal of Mass Emergencies and Disasters* 5 (3): 199–221.

Sonenshein, S. 2009. Emergence of ethical issues during strategic change implementation. *Organization Science* 20 (1): 223–239.

Stein, M. 2004. The critical period of disasters: Insights from sense-making and psychoanalytic theory. *Human Relations* 57 (10): 1243–1261.

Stensaker, I., and J. Falkenberg. 2007. Making sense of different responses to corporate change. *Human Relations* 60 (1): 137–177.

Stephens, K. K., Jahn, J. L., Fox, S., Charoensap-Kelly, P., Mitra, R., Sutton, J., ... and Meisenbach, R. J. 2020. Collective sensemaking around COVID-19: Experiences, concerns, and agendas for our rapidly changing organizational lives. *Management Communication Quarterly* 34(3): 426-457.

Strauss, A., and J. Corbin. 1998. Basics of qualitative research techniques. Thousand Oaks: Sage publications.

Tversky, A., and D. Kahneman. 1992. Advances in prospect theory: Cumulative representation of uncertainty. *Journal of Risk and Uncertainty* 5 (4): 297–323.

Vough, H. 2012. Not all identifications are created equal: Exploring employee accounts for workgroup, organizational, and professional identification. *Organization Science* 23 (3): 778–800.

Weick, K. 1978. The spines of leaders Leadership: Where Else Can We Go? ed MM McCall and MW Lombardo.



Weick, K.E. 1988. Enacted sensemaking in crisis situations [1]. Journal of Management Studies 25 (4): 305–317.

Weick, K.E. 1989. Theory construction as disciplined imagination. Academy of Management Review 14 (4): 516–531.

Weick, K. E. 1993. The collapse of sensemaking in organizations: The Mann Gulch disaster. Administrative Science Quarterly 38 (4): 628–652. https://doi.org/10.2307/2393339

Weick, K. E. 1995. Sensemaking in organizations (vol. 3). Sage.

Weick, K. E. 2009. Cosmos vs. chaos: Sense and nonsense in electronic contexts. In Knowledge in organizations, 213–226. London: Routledge.

Weick, K.E. 2010. Reflections on enacted sensemaking in the Bhopal disaster. *Journal of Management Studies* 47 (3): 537–550.

Weick, K.E., K.M. Sutcliffe, and D. Obstfeld. 2005. Organizing and the process of sensemaking. Organization Science 16 (4): 409–421.

World Medical Association. 2013. World medical association declaration of Helsinki: Ethical principles for medical research involving human subjects. JAMA 310 (20): 2191–2194. https://doi.org/10.1001/jama. 2013.281053 (Accessed on 12/07/2022).

Publisher's Note Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

Springer Nature or its licensor holds exclusive rights to this article under a publishing agreement with the author(s) or other rightsholder(s); author self-archiving of the accepted manuscript version of this article is solely governed by the terms of such publishing agreement and applicable law.

Shradha Kundra is a Doctoral student pursuing a Ph.D. in OB-HR at the Indian Institute of Management Shillong, India. Her research interests include behavioral sciences, crisis management, organizational psychology and behavior, human resources management, Gender in Organizations, and Leadership.

Rohit Dwivedi is an Associate Professor in OB-HR at the Indian Institute of Management Shillong, India. Rohit Dwivedi has a D.Phil. In Psychology (Organizational Behavior & Change) and M.Psy. HRDM (Masters Degree in Human Resource Development & Management) from the UGC CAS in Psychology, after completing his Graduation in Commerce (B.Com.), all from Allahabad University. His research interests include behavioral sciences, organizational psychology and behavior, memetics, and human resources management.

