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Research Article

Exploring Job Security Practices at Tronox KZN Sands: Strategies, Challenges and Employee Perceptions

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ABSTRACT

Job security remains a vital factor influencing employee motivation, organizational commitment, and workforce stability, especially in high-risk industries such as mining. This study examines the strategies, challenges, and employee perceptions related to job security at Tronox KZN Sands during the COVID-19 pandemic. Guided by the Job Demands-Resources (JD-R) theoretical framework, the research employs a quantitative approach, utilizing a structured questionnaire administered to 100 employees at Tronox's KwaZulu-Natal operations. The findings reveal that, although Tronox implemented various strategic measures—including workforce restructuring, salary adjustments, and flexible work arrangements—employees continued to experience increased anxiety, perceptions of managerial indifference, and disparities in job security across different employment categories. Additionally, the study indicates that qualifications and individual performance did not necessarily correlate with greater job security. Factor analysis identified four key themes: pandemic-related anxiety and career disruption; changes in working conditions and financial stress; the perceived importance of qualifications and effort; and concerns regarding recognition and employment inequalities. These insights highlight the importance of transparent communication, equitable human resource practices, and ongoing employee engagement initiatives to enhance job security and organizational resilience in future crises.

Keywords*:* Job Security, Employee Perceptions, COVID-19 Pandemic, JD-R Theory and Tronox KZN Sands

INTRODUCTION

Job security has long been recognized as a fundamental element influencing employee satisfaction, motivation, and overall organizational stability (Hur, 2022). In the context of today's dynamic global environment—characterized by economic fluctuations, technological innovations, and significant disruptions such as the COVID-19 pandemic—the importance of effective job security practices has become increasingly apparent. Organizations across various industries are facing the challenge of maintaining operational performance while prioritizing employee wellbeing (Scott et al., 2021). Tronox KZN Sands, a prominent entity within South Africa's mining and minerals processing sector, is no exception. Operating in an industry susceptible to cyclical demand, volatile commodity prices, and evolving regulatory requirements, the company has experienced intensifying pressures in recent years (Valackiene et al., 2021; De Donno, 2024). The COVID-19 pandemic further complicated this environment by causing supply chain disruptions, fluctuating market demand, and implementing heightened health and safety measures—testing both the organization's resilience and its commitment to job security.

Job security, typically defined as the confidence in ongoing employment and income stability, plays a crucial role in shaping employee morale, productivity, and retention (Al-Harthy & Yusof, 2022). Research indicates that perceived job insecurity can lead to negative outcomes such as increased stress, decreased job satisfaction, and reduced organizational commitment (Anand et al., 2023). These impacts were especially pronounced during the pandemic, highlighting the need for innovative and adaptive workforce strategies. In response, Tronox KZN Sands adopted various measures including workforce restructuring, flexible work arrangements, and enhanced internal

communication. However, the effectiveness of these strategies and the extent to which they are perceived positively by employees warrant further investigation.

This study examines the relationship between organizational strategies and employee perceptions of job security at Tronox KZN Sands during the COVID-19 crisis. By exploring employee experiences and attitudes, the research aims to identify gaps in current practices and suggest opportunities for improvement. Ultimately, this work contributes to the broader discussion on workforce resilience and sustainability in high-risk industries, offering a strategic framework to strengthen job security within the mining sector and other similarly impacted industries.

Problem statement

The COVID-19 pandemic heightened concerns regarding job security across various industries, particularly in sectors such as mining, where cyclical demand and regulatory challenges already threaten workforce stability. Tronox KZN Sands experienced additional pressures to preserve employment during this period, implementing different strategies to manage operational disruptions and financial uncertainties. However, the effectiveness and employee perceptions of these measures remain uncertain. Recognizing the critical importance of job security in influencing employee motivation, morale, and retention, there is a notable lack of empirical research on this topic within Tronox KZN Sands. This study aims to address that gap by analysing the strategies employed, challenges faced, and employee responses, with the goal of providing practical insights to enhance job security practices, organizational resilience, and employee well-being during current and future disruptions.

Theoretical Perspective - The Job Demands-Resources (JD-R) Theory

The Job Demands-Resources (JD-R) Theory offers a relevant and comprehensive framework for analyzing job security practices at Tronox KZN Sands by examining how job demands and resources interact to impact employee well-being and performance (Demerouti and Bakker, 2023). Within this framework, job security strategies such as supportive leadership, transparent communication, and equitable policies function as job resources that assist employees in managing stress and maintaining motivation (Anand et al., 2023; Volderauer et al., 2024). Conversely, job demands—such as economic instability, organizational restructuring, and pandemic-related pressures—pose significant psychological and operational challenges that can lead to stress and burnout if not properly addressed (Kwon & Kim, 2020; Yang & Long, 2024). Employee perceptions play a mediating role by influencing how individuals interpret these demands and resources, thereby affecting their engagement, commitment, and stress levels (Radic et al., 2020; Collie, 2023; Wang et al., 2020). As indicated by the JD-R theory, positive resource availability enhances engagement, whereas excessive demands may contribute to burnout (Rattrie, Kittler & Paul, 2020). Framing job security initiatives as key resources aligned with employee perceptions provides valuable insights into fostering resilience and organizational sustainability (Li, 2024). Therefore, this theory serves as a strong foundational framework for the investigation of workforce management practices at Tronox KZN Sands.

LITERATURE REVIEW

Job security is a vital factor in alleviating employee anxiety and concerns related to potential job loss, thereby enabling individuals to maintain stable employment and avoid the adverse effects associated with unemployment (Stankevičiūtė, Staniškienė & Ramanauskaitė, 2021; Aman-Ullah et al., 2022). It provides employees with confidence regarding the continuity of their roles, which can enhance their overall sense of security and well-being. Furthermore, job security supports the right to fair employment by safeguarding workers from arbitrary dismissal within the framework of contractual agreements (Arnow-Richman & Verkerke, 2023). In contrast, a lack of job security can expose employees to increased risks of unemployment, potentially impacting their motivation and morale negatively (Nemteanu, Dinu & Dabija, 2021). When employees perceive their employment as stable, it can improve motivation, increase job satisfaction, and foster a greater sense of professional fulfillment (Gupta et al., 2024).

Factors contributing to job security

Employees who perceive their jobs as secure are more likely to dedicate themselves to long-term careers within their organizations (Rouvroye et al., 2022). However, in industries such as mining, job security can vary significantly based on employment type—whether permanent, casual, or temporary—resulting in disparities in workforce stability (Johnston, Shields & Suziedelyte, 2021). The increasing competitiveness of the mining sector has led to a rise in

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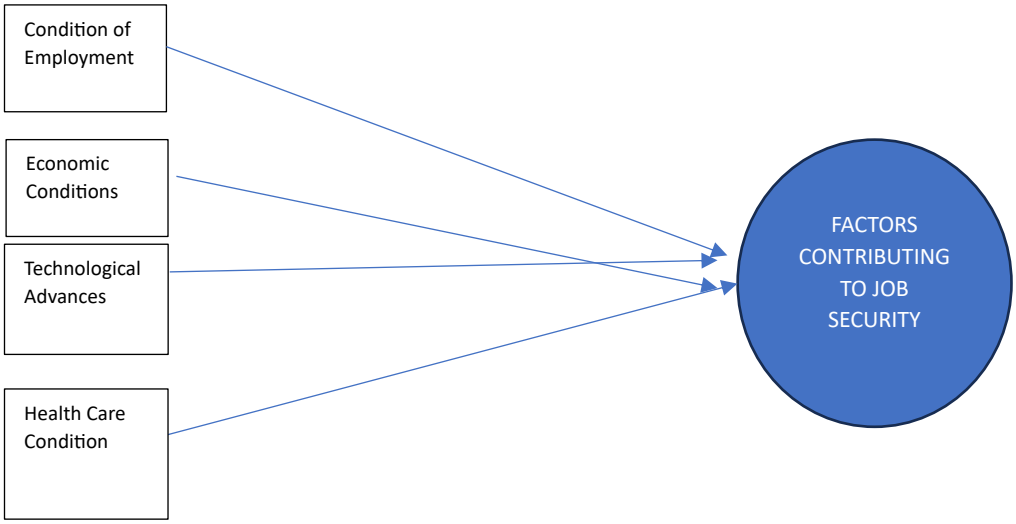
contract-based employment, which often contributes to heightened feelings of insecurity among workers (Khumalo, 2021). Job insecurity generally refers to employees' concerns about potential job loss; this issue was exacerbated during the COVID-19 pandemic but has been an ongoing challenge prior to that, and is expected to persist (Okogba & Ehimmen, 2024; Basyouni & El Keshky, 2021). The pandemic notably disrupted organizational operations, resulting in reduced work hours and layoffs (Wang et al., 2020). Jiang and Naswall (2023) emphasize that job security is influenced by a complex interplay of societal, organizational, and individual factors, highlighting the importance of comprehensive management strategies to address this multifaceted issue.

Figure 1: Factors contributing to Job security.



Source: Wilson, Fitzgerald, Oosterhoff, Sevi, and Shook, (2020:4) adapted

Employment Conditions within the Company

During the COVID-19 pandemic, working conditions at Tronox KZN Sands were significantly influenced by employees' employment status and organizational policies. Organizational culture and the nature of employee relationships played a key role in determining employment retention during workforce adjustments, with non-core and contractual employees being the most affected, as noted by Mesfin et al. (2020) and supported by Marimuthu et al. (2021). The mining industry historically experienced low perceptions of job security, a situation that was further exacerbated by pandemic-related shutdowns and workforce reductions, particularly among small-scale mining entities (Gałaś et al., 2021). In response to financial challenges, Tronox KZN Sands adopted a "no-work, no-pay" policy for contingent and fixed-term workers during the lockdown period, and salary reductions were implemented for permanent employees (Xulu et al., 2021).

Economic Conditions

The broader economic environment during the pandemic had profound impacts on both national and local economies. Mining activities typically contribute positively to local economies by generating income and employment opportunities (Hilson & Maconachie, 2020; Williams & Nikijuluw, 2020). However, the COVID-19 crisis induced widespread economic downturns across multiple sectors (Basyouni & Keshky, 2021). As a result, companies, including Tronox, introduced measures such as salary reductions and layoffs to cope with the economic slowdown (Gutiérrez Banegas et al., 2022). The global recession in 2020, marked by a GDP decline of over 6%, led to decreased demand for minerals and disrupted supply chains (Peng et al., 2024; Jowitt, 2020). Tronox KZN Sands experienced these effects directly, with reductions in demand for heavy minerals and iron ore, leading to layoffs and the closure of a mining site (Swart et al., 2022). Despite these challenges, the mining sector remained vital to the economic stability of several local communities (Fanyane, 2023).

Technological Advances

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Advancements in technology, including automation, artificial intelligence, and robotics, have enhanced operational efficiency within the mining sector but also raised concerns regarding job security (Lee, Probst & Bazzoli, 2022). These innovations enable companies to operate with fewer personnel, supporting workforce reductions and a shift toward more capital-intensive production approaches. The pandemic further accelerated the adoption of such technologies, as companies aimed to reduce on-site staffing levels (Lee, Huang & Ashford, 2019). At Tronox KZN Sands, the deployment of virtual reality (VR) for training simulations has improved safety protocols and preparedness without requiring physical presence (Bishop, 2024). Additionally, smart surveillance systems leveraging deep learning analytics monitor compliance with health protocols and identify hazards such as dust clouds and overcrowding conditions (Opperman, 2024; Lee et al., 2022).

Healthcare and Worker Vulnerabilities

Health vulnerabilities among employees significantly affected job security, particularly for individuals aged 60 and above, or those with underlying health conditions and high BMI levels (Solanki, Kelly & Cornell, 2019; Swart et al., 2022). Tronox's classification of certain workers as vulnerable restricted their work participation during the pandemic. Health assessments, including BMI measurements, were used to evaluate health risks related to obesity (Barai, 2022). Broader health issues prevalent in mining communities, such as respiratory illnesses, heightened the risk of severe COVID-19 outcomes for employees (Purkayastha, Vanroelen & Bircan, 2021; Naidoo & Jeebhay, 2021). These health concerns added complexity to employment considerations and underscored the importance of implementing comprehensive health and safety measures to safeguard jobs during health crises.

Challenges Impacting Job Security at Tronox KZN Sands

The COVID-19 pandemic significantly affected job security at Tronox KZN Sands, presenting various operational and organizational challenges. These included employee restructuring, salary adjustments, reduced working hours, disruptions to production, retention concerns, implementation of health and safety protocols, and workforce reductions.

Major Employee Restructuring

Organizational adjustments during the pandemic resulted in changes to job roles, responsibilities, and reporting lines, alongside workforce reductions. These modifications increased employee uncertainty and psychosocial risks, driven by declining mineral demand, cost-containment strategies, corporate acquisitions, and technological advancements (Mathisen et al., 2023; Fox, 2017; Xulu et al., 2021).

Salary Adjustments

In response to economic pressures, Tronox and other mining companies introduced measures such as salary reductions and "no work, no pay" policies during government-imposed lockdowns. While essential workers and remote staff maintained their salaries, some employees experienced temporary layoffs and income loss, with specific impacts varying according to employment levels (Bedford et al., 2023; Tronox KZN Sands, 2024; Ramdoo, 2020).

Reduced Working Hours

To mitigate financial impacts, Tronox adopted reduced working hours based on the "no work, no pay" principle. Short-time work arrangements helped retain employees during periods of decreased workload while ensuring compliance with health and safety standards (Giupponi & Landais, 2021; Quiroz et al., 2024).

Production Disruptions

The pandemic caused notable disruptions in mining operations and supply chains due to lockdown measures, transportation difficulties, and decreased global demand for minerals. These factors led to reduced productivity and temporary closures of processing facilities, affecting employee job stability (Jowitt, 2020; Xulu et al., 2021; Gałaś et al., 2021; Maoela et al., 2024).

Employee Retention Challenges

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Heightened job insecurity contributed to increased employee turnover, as staff sought more stable employment opportunities. This turnover resulted in additional recruitment and training costs and the potential loss of valuable skills and organizational knowledge (Iipumbu, 2022; Sishuwa & Phiri, 2020; Hadebe et al., 2022).

Health and Safety Measures

Ensuring compliance with health and safety legislation posed operational challenges, including extended cleaning processes and physical distancing requirements that impacted productivity. A shortage of personal protective equipment (PPE) also compromised worker safety, leading to increased absenteeism (Stewart et al., 2020; Paz-Barzola et al., 2023; Lalla-Edward et al., 2022).

Workforce Reductions

Government directives for social distancing and lockdowns mandated reductions in on-site workforce and operational hours. These measures resulted in temporary layoffs and workforce downsizing at Tronox. During certain periods, South African policies required workforce reductions of up to 75% to limit COVID-19 transmission (Johnstone, 2021; Witsersi et al., 2021; McLaren & Wang, 2020; Kowal et al., 2022; Gałaś et al., 2021).

Research Methodology

This study employs a quantitative research approach to examine job security practices at Tronox KZN Sands. Data was collected through structured, self-administered questionnaires distributed to a target population of 110 employees via a census method. The research was conducted at the Central Processing Complex and Fairbreeze site in KwaZulu-Natal. A pilot group of 10 employees was used to validate the questionnaire's reliability through Cronbach's Alpha, with these responses excluded from the final analysis. Data analysis was performed using SPSS and Excel, utilizing both descriptive and inferential statistics. Ethical considerations, including confidentiality and anonymity, were strictly upheld. The study focuses on job security challenges within the mining sector during the COVID-19 pandemic, employing a 5-point Likert scale to gather employee insights and aiming to address gaps in existing literature related to workplace motivation and stability.

The Sample

In total, 100 questionnaires were distributed to Tronox KZN Sands employees taking part to this study and 100 were returned which gave a 100% response rate. The response rate is excellent. Demuyakor (2020:4), cited that any study with a response rate of 50% and above is appropriate for analysis, hence our response rate of 100% was very excellent to continue with the analysis.

The Research Instrument

The research instrument comprised 43 items, utilizing either nominal or ordinal levels of measurement. The questionnaire was organized into three sections, each addressing different themes as detailed in Table 1 below:

Table 4.1: The questionnaire sections

A	**Biographical data**
B	**Job Security**

Reliability Statistics

Ahmed and Ishtiaq (2021:2402) defined reliability as the consistency of a measurement method. The two primary dimensions of precision are reliability and validity. Reliability is determined by conducting multiple measurements on the same subjects. Hair, Hult, Ringle, Sarstedt, Danks, and Ray (2021:77) noted that a reliability coefficient of 0.60 or higher is generally regarded as "acceptable" for a newly developed construct. The table 2 below reflects the Cronbach's alpha score for all the items that constituted the questionnaire.

Table 2 Cronchbach's Alpha Value

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	Section	Number of Items	Cronbach's Alpha
Section B: All items included		17	0.853
C1.1	Job Security and Career Implications of Covid-19	5	0.837
C1.2	Pandemic's Influence on Job Risk and Working Conditions	6	0.807
C1.3	Securing Employment through Qualifications and Performance	3	0.771
C1.4	Perceptions of Insecurity and Risk Among Workforce Segments	3	0.480

According to Hair, Tomas, Hult, Ringle, Sarstedt, Danks and Ray (2021:77) reliability values between 0.60 and 0.70 are considered "acceptable in exploratory research," whereas values between 0.70 and 0.90 range from "satisfactory to good." Values above 0.90 (and above 0.95) are problematic, since they indicate that the indicators are redundant, thereby reducing construct validity. The reliability scores for all sections exceed the recommended Cronbach's alpha value. This indicates a degree of acceptable, consistent scoring for these sections of the research. When considering all items included in Section B, the composite Cronbach's alpha score is 0.853, reflecting high internal consistency for the section. The overall Cronbach's alpha for Section C, considering all items included, is 0.804, which indicates high internal consistency for the composite measure. Perceptions of Insecurity and Risk Among Workforce Segments, with 3 items, however, has a Cronbach's alpha of 0.480, which is below the acceptable threshold, suggesting that it was low because there were few items. The section was retained in the study. The data suggests that, with the exception of subsection C1.4, the questionnaire exhibits high reliability in measuring the constructs of interest.

Biographical Data

This section summarises the biographical characteristics of the respondents. The biographical data used in this study are age, race, gender, education, nature of employment, present position, and length of service at Tronox KZN Sands. Biographical data indicates the nature of respondents who participated in the study also include information concerning a person's history, that is, about an individual's personality, attitudes, experiences, and skills (Wang and Song, 2022:15894). The results derived from all respondents who participated in the study, indicated the gender distribution within the sample. The Figure 4 shows the results.

GENDER

Table 3: Gender

Number	**Gender**	**Frequency**	**Percent (%)**
1.	Male	81	81,0
2.	Female	19	19,0
	Total	100	100,0

The overall ratio of males and females who participated in the study is 4:1 (81.0%: 19.0%) respectively. According to Kansake, Sakyi-Addo and Dumakor-Dupey (2021), large-scale industrial mining has historically been a male-dominated field due to the physically demanding nature of the work. The table 4 below describes the overall gender distribution by age. The findings of this study are consistent with those from other research within the mining sector, indicating that the number of male employees exceeds that of their female counterparts. Furthermore, Goldin (2022) highlights that women have experienced the adverse effects of COVID-19 on employment to a greater extent than men. This is because part-time employment in which women are over-represented declined much faster than full-time employment globally, resulting in more women losing their jobs than men. Muchadenyika (2020:715) further

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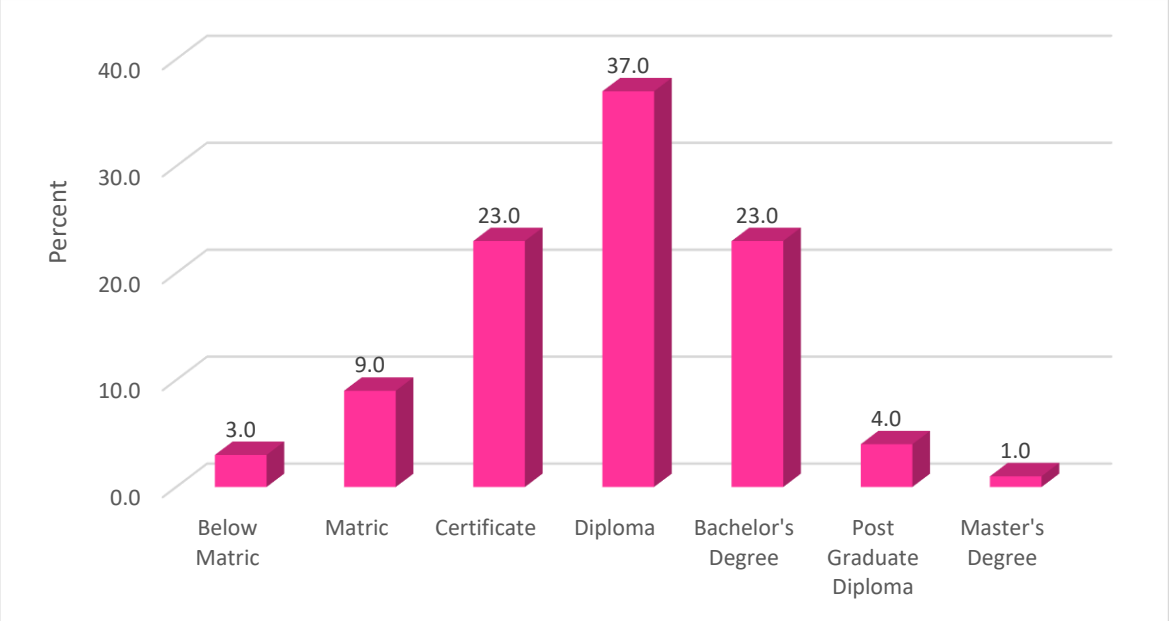
agreed that the role of women in mining is largely under-recognised, under-theorised and under-investigated. The table 4 below describes the overall gender distribution by age.

ACADEMIC ACHIEVEMENT

The figure 5 below indicates the qualifications of the respondents.

Figure 5: ACADEMIC ACHIEVEMENT



A significant majority, 88.0%, possess qualifications obtained after completing their school education, underscoring a high level of educational attainment within the respondent pool. The distribution of qualifications is as follows: 1.0% have attained a master's degree, this suggests a smaller proportion of the respondents have pursued education to an advanced level. A small percentage, 3.0%, have an educational level below matriculation. Those with a matric certificate represent 9.0% of the respondents. A combined total of 60.0% have either a Certificate or Diploma, with the former accounting for 23.0% and the latter showing a substantial 37.0%, making it the most common qualification among the respondents. Bachelor's degrees are held by 23.0% of the participants, indicating a significant representation of undergraduate-level education ($p < 0.001$). Postgraduate qualifications, while less common, are still present: 4.0% of respondents have completed a Postgraduate Diploma. The data implies a workforce with diverse educational backgrounds, providing a range of skills and knowledge base. This statistic is valuable as it suggests that a significant proportion of respondents hold advanced qualifications. This implies that the feedback received is from a knowledgeable demographic. Additionally, these findings highlight that the impact of COVID-19 was felt across nearly all segments of the workforce at Tronox KZN Sands, irrespective of educational background.

Section Analysis

Table 6: Job Security at Tronox during COVID-19 pandemic

Number	Statements	Strongly Disagree		Disagree		Neutral		Agree		Strongly Agree	
		Count	Row N %	Count	Row N %	Count	Row N %	Count	Row N %	Count	Row N %
C.1.1	Job security has a positive effect on my	6	6.0%	21	21.0 %	10	10.0%	10	10.0%	11	11.0%

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	working environment.										
C.1.2	My educational qualifications improved my chances of attaining job security	13	13.0%	39	39.0 %	21	21.0%	17	17.0%	10	10.0%
C.1.3	If I meet deadline and work additional hours, I have a better chance of having job security.	18	18.0 %	34	34.0 %	30	30.0%	18	18.0%	0	0.0%
C.1.4	Management does not appreciate or acknowledge my efforts which affects my job security.	1	1.0%	23	23.0 %	34	34.0%	36	36.0%	6	6.0%
C.1.5	Low level of job security negatively affect day to day routine with high possibility of causing employee to make mistakes?	1	1.0%	6	6.0%	5	5.0%	57	57.0%	31	31.0%
C.1.6	The job security of fixed term, contractors and contingent workers are at a higher risk than permanents	13	13.0%	16	16.0 %	10	10.0%	27	27.0%	34	34.0%
C.1.7	Closure of mining sites effected my job security	3	3.0%	6	6.0%	9	9.0%	55	55.0%	27	27.0%

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C.1.8	My normal job has effectively halted during lockdown period	3	3.0%	8	8.0%	10	10.0%	47	47.0%	32	32.0%
C.1.9	The pandemic has directly changed my career plan	1	1.0%	7	7.0%	23	23.0%	58	58.0%	11	11.0%
C1.10	The pandemic has shuttered and threatened the company's production which led to job loss	2	2.0%	2	2.0%	2	2.0%	63	63.0%	28	28.0%
C.1.11	I feel threatened at my job	10	10.0 %	3	3.0%	17	17.0%	34	34.0%	36	36.0%
C.1.12	I am anxious that my job might be affected.	2	2.0%	2	2.0%	10	10.0%	51	51.0%	35	35.0%
C.1.13	Pandemic resulted in financial anxiety and financial risk to all employees in my organisation.	2	2.0%	6	6.0%	56	56.0%	36	36.0%	0	0.0%
C.1.14	My organisation enforced all safety precautionary majors to prevent employees from direct contact with COVID-19.	1	1.0%	26	26.0 %	52	52.0%	13	13.0%	8	8.0%
C.1.15	Lockdown has negatively affected my working hours.	1	1.0%	5	5.0%	3	3.0%	61	61.0%	61	61.0%

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C.1.16	Covid- changed my work environment and employment conditions.	1	1.0%	5	5.0%	3	3.0%	64	64.0%	27	27.0%
C.1.17	I worked long unapproved overtime hours during lockdown.	1	1.0%	5	5.0%	8	8.0	62	62.0%	24	24.0%

According to the survey results, 27% of respondents indicated that they either 'strongly disagree' or 'disagree' with the statement, "Job security has a positive effect on my working environment" (C1.1). This suggests that Tronox employees experienced concerns regarding job security during the lockdown period. As noted by Chikukwa (2017:127), a failure to motivate employees can create a disparity between individual and organizational needs. The statement C.1.2 recorded the highest percentage of disagreement, with 52% of respondents disagreeing or strongly disagreeing. These findings indicate that, during the COVID-19 pandemic, employees across various educational backgrounds felt vulnerable to the effects of the virus. Maroto, Pettinicchio, and Lukk (2021:876) highlighted that the pandemic significantly impacted employment conditions for mine workers globally, particularly for those with chronic health issues who are at higher risk of contracting the virus.

Statement C.1.4 demonstrated that 42% of respondents agreed or strongly agreed, suggesting that Tronox management recognizes the importance of acknowledging and appreciating their workforce's contributions toward achieving organizational goals. Fraser (2024:2) asserts that a well-structured reward and recognition program enhances talent attraction and retention, boosts employee satisfaction, and fosters a positive work environment. Furthermore, 64% of the workforce agreed that COVID-19 had altered their work environment and employment conditions, thereby threatening job security. Matli (2020:137) noted that the pandemic had a significant effect on workplaces and productivity across various organizations. In response to global lockdown measures, many organizations transitioned to remote work for their employees. However, this shift created challenges for the mining industry, where technicians and miners were unable to fulfil their responsibilities from home.

Table 7: The overall average score for JS

		Count	Mean	Standard deviation	Median	Percentile 25	Percentile 75	Maximum	minimum
C	Job Security	100	3.69	0.47	3.76	3.59	3.94	4.71	1.76

FACTOR ANALYSIS

Factor analysis is a statistical method used to simplify and interpret complex data by identifying underlying factors that explain correlations among observed variables. According to Bandalos and Finney (2018), it reduces data dimensionality by modeling observed variables as combinations of unobserved factors and error terms, helping to uncover latent constructs across various disciplines. Shrestha (2021) adds that factor analysis identifies independent variable groupings and relies on preliminary tests like the Kaiser-Meyer-Olkin (KMO) measure and Bartlett's Test to assess data suitability, with higher KMO values indicating stronger appropriateness for analysis.

Bartlett's test of sphericity

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Panda, Mishra, and Behera (2021:26) state that Bartlett's Test of Sphericity assesses the relatedness of variables by testing the hypothesis that the correlation matrix is an identity matrix, which would indicate unrelated variables unsuitable for structure detection. A significance level below 0.05 suggests that factor analysis is appropriate. This method is applied specifically to Likert scale items, with certain components further divided into finer components, as shown in the rotated component matrix. Reddy and Kulshrestha (2019:2) agree, highlighting that this approach evaluates the proportion of variance among all variables.

Table 8: KMO and Bartlett's Test

	Kaiser-Meyer-Olkin Measure of Sampling Adequacy	Bartlett's Test of Sphericity		
		Approx. Chi-Square	df	Sig.
Job Security	0.804	790.879	136	< 0.001

All conditions necessary for factor analysis have been met. Specifically, the Kaiser-Meyer-Olkin Measure of Sampling Adequacy must exceed 0.500, and the significance value for Bartlett's Test of Sphericity must be less than 0.05.

Table 9: Rotated Component Matrix: Job Security

	C	Component			
		1	2	3	4
C1.1	Low level of job security negatively affect day to day routine with high possibility of causing employee to make mistakes?	0.711	0.301	-0.004	0.034
C1.2	Closure of mining sites effected my job security	0.847	0.112	0.144	0.137
C1.3	My normal job has effectively halted during lockdown period	0.732	0.206	-0.315	0.002
C1.4	The pandemic has directly changed my career plan	0.509	0.294	0.149	0.422
C1.5	I am anxious that my job might be affected	0.772	0.187	-0.170	0.228
C2.1	The pandemic has shuttered and threatened the company's production which led to job loss	0.443	0.531	0.138	0.382
C2.2	Pandemic resulted in financial anxiety and financial risk to all employees in my organisation	0.185	0.884	-0.020	0.021
C2.3	My organisation enforced all safety precautionary majors to prevent employees from direct contact with COVID-	-0.215	0.418	0.334	0.163
C2.4	Lockdown has negatively affected my working hours	0.329	0.739	-0.003	0.178
C2.5	Covid- changed my work environment and employment conditions	0.369	0.808	0.047	0.067
C2.6	I worked long unapproved overtime hours during lockdown	0.326	0.471	-0.161	0.384
C3.1	Job security has a positive effect on my working environment	0.118	0.110	0.775	-0.066
C3.2	My educational qualifications improved my chances of attaining job security	-0.170	0.091	0.803	-0.183
C3.3	If I meet deadline and work additional hours, I have a better chance of having job security	-0.020	-0.126	0.802	0.210

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C4.1	Management does not appreciate or acknowledge my efforts which affects my job security	0.099	0.147	-0.073	0.768
C4.2	The job security of fixed term, contractors and contingent workers are at a higher risk than permanents	0.020	0.052	0.476	0.681
C4.3	I feel threatened at my job	0.254	0.121	-0.362	0.518
	Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.				
	a. Rotation converged in 6 iterations.				

The principal component analysis identified four key sub-themes reflecting employees' experiences related to job security and motivation during the COVID-19 pandemic. The first sub-theme pertains to the anxiety and uncertainty generated by the pandemic, which impacted job stability and prompted reconsideration of career plans. The second examines how the pandemic altered working conditions, including operational risks, financial pressures, and changes in workplace safety protocols. The third highlights the importance of educational qualifications and strong job performance in improving employment security. Lastly, the fourth addresses perceptions of job insecurity, feelings of insufficient recognition from management, and disparities in job stability across different employment arrangements. Collectively, these themes provide a comprehensive understanding of how the pandemic influenced work-related attitudes and behaviours.

CONCLUSION

The COVID-19 pandemic posed significant challenges to job security at Tronox KZN Sands, disrupting operational continuity and impacting employment dynamics. In response, the organization implemented practical strategies such as restructuring, enhanced health and safety protocols, and adjusted work arrangements. However, these measures received varied perceptions among employees. The findings indicate that concerns about job security were influenced not only by external economic factors but also by internal organizational practices, including limited managerial recognition and disparities in employment conditions between permanent and contingent workers. Additionally, while educational qualifications and strong performance were anticipated to bolster job security, this was not consistently recognized by employees. Factor analysis underscored the complex nature of job insecurity, involving emotional, operational, and organizational dimensions. Moving forward, it is essential for Tronox and similar organizations to adopt comprehensive and inclusive workforce management strategies. This includes improving leadership communication, aligning HR policies with employee expectations, and prioritizing psychological safety as a core component of job security. Such initiatives are crucial for fostering workforce resilience, enhancing retention, and ensuring sustainable performance in uncertain environments.

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