

# Resilience in Crisis: Mental Health and Psycho-Social Well-Being of Working Women During COVID-19 Pandemic Lockdown in Kota City, Rajasthan

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**Abstract:** The COVID-19 pandemic and associated lockdowns significantly impacted mental health, particularly among working women in India, who faced unique challenges while balancing professional and domestic responsibilities. This study aimed to explore how the mental health of working women in Kota evolved during and after the COVID-19 lockdown compared to pre-pandemic levels through the lens of Stress Theory. A non-experimental cross-sectional correlational design was used, surveying 240 women (both working and non-working) chosen using a purposive sampling technique. The data was collected using the Ryff and Keyes Well-being Scale (1995) across three periods: pre-pandemic, during lockdown, and post-lockdown. Findings revealed that the lockdown significantly heightened stressors, with non-working experiencing a greater negative impact on mental health compared to working women. However, working women demonstrated resilience in areas like life purpose and personal relations, despite facing significant strains during the pandemic. The study highlights the differential impacts of cumulative stress on mental health. The analysis shows that working women exhibit both vulnerabilities and strengths compared to non-working women. These findings suggest the need for targeted mental health interventions for working and non-working women during crises. This highlights the importance of strengthening psychosocial resources and coping mechanisms through supportive workplace policies and community programs.

**Keywords:** Mental Health, Professional Responsibility, Working Women, Domestic Responsibility, Non-Working, Psychosocial Well-being

## Introduction

The COVID-19 pandemic has unleashed an unparalleled global crisis. Its impact drastically altered the daily life and exerted profound effects on both physical and mental health (Singh et al., 2022). In India, the government responded to the rapid spread of the virus by implementing a series of stringent nationwide lockdowns. These restrictions spanned four phases from March 25th to May 31st, 2020. While these lockdowns were crucial in mitigating the spread of COVID-19, they

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inadvertently created a range of psychosocial stresses (Chatterjee et al., 2021). Vulnerable groups, especially working women, faced rigid consequences (Roslin & Rakesh, 2024).

Working women in India face unique challenges during the pandemic (Aiswarya & Perwez, 2023). Many have to juggle work and household chores. Working from home became the norm, and schools and childcare centers were closed. This has made life particularly difficult for working mothers. This dual pressure not only disrupted their professional routines but also significantly strained their mental health, leading to heightened levels of anxiety, depression, and stress (Chen et al., 2024).

Despite widespread acknowledgment of these challenges, much of the existing research (for e.g., Kamble et al., 2022; Gayatri, 2021; Panda et al., 2021) largely focuses on the general population or specific groups such as healthcare workers, children, and the elderly, with limited attention given to the unique experiences of working women, particularly in the Indian context. While some studies (for e.g., Basu et al., 2021; Mishra & Roy, 2023) have explored the mental health challenges faced by women during the pandemic, they often generalize findings without delving into the distinct pressures encountered by working women who had to balance professional responsibilities with increased domestic workloads and non-working women who shoulders only domestic responsibilities. Moreover, the specific experiences of working women, particularly within distinct urban settings such as Kota City, remain underexplored, leaving a significant gap in one's understanding of the mental health implications of the pandemic on this demographic.

In response to these gaps, this study seeks to explore the following research question: How did the mental health of working women in Kota City, evolve during the COVID-19 lockdown era and aftermath compared to pre-pandemic levels? This question has been addressed within the Sociological framework of Stress Theory in an attempt to shed light on the specific mental health challenges faced by working women in a mid-sized Indian city during the COVID-19 lockdown. Stress theory holds that the accumulation of stressful events and chronic stress can overwhelm an individual's psychosocial resources. This might result in psychological distress and disorders.

This study is crucial as it sheds light on the often-overlooked mental health impacts of the COVID-19 pandemic on working women in India, offering a nuanced perspective by examining the period of lockdown in Kota City. By uncovering the specific challenges faced by this demographic, the research provides vital insights that can guide policymakers and mental health professionals in creating targeted interventions to support working women during any future crises.

## **Materials and Method**

This study employed a non-experimental, cross-sectional correlational research design to investigate the mental health of working women and non-working women in Kota City, India, during the pre-COVID period, during the lockdown period, and thereafter. A total of 240 women, aged 18 to 60, who were either working (employed) or non-working and literate in English, voluntarily participated in the study. The selection of women was made using a purposive sampling technique. This sample of 240 women was deemed adequate to ensure reliable statistical analysis and meaningful comparisons across groups and time periods. The study adhered to strict ethical

standards, ensuring participants were informed, uncoerced, and could withdraw at any time. Anonymity was maintained to protect participants from any potential harm.

Data collection occurred over three weeks in July 2024, where participants were briefed, consented, and provided demographic information before completing the Ryff and Keyes (1995) Well-being Scale. This scale has widely been used in various cultural contexts, including India, and has demonstrated good construct validity in assessing different aspects of psychological well-being. The Scale measured six key factors—autonomy, environmental mastery, personal growth, positive relations, purpose in life, and self-acceptance—using 18 items rated on a 7-point Likert scale, during three eras—pre-pandemic, during lockdown, and post-pandemic. The scale's reliability was high, with a Cronbach's Alpha of 0.862. Data analysis was conducted using SPSS software (version 23.0). The data were summarized using descriptive statistics (mean and standard deviation). An independent sample t-test was used to examine the differences in mental health between working and non-working women in the three time periods.

## Results and Discussion

### Analysis of Demographic Factors

**Table 1 – Demographic Profile of Participants**

S. No.	Demographic Factors (N=240)	Count	Percent
1.	Age	18 – 30 years	11.7%
		30 – 40 years	37.9%
		40 – 50 years	32.9%
		50 – 60 years	17.5%
2.	Working Status	Employed	50%
		Homemaker	50%

The demographic profile of the study participants (N=240), as shown in Table 1, reveals a diverse age distribution, with the majority falling within the 30-40 years (37.9%) and 40-50 years (32.9%) age brackets, followed by those aged 50-60 years (17.5%) and a smaller proportion aged 18-30 years (11.7%). This distribution highlights a significant concentration in the 30-50 years age bracket, comprising 70.8% of the sample, indicating a predominance of women in their prime working years, which could be pivotal in understanding the study's outcomes, particularly in relation to work-life dynamics. The mean age of 40.51 years, with a standard deviation of 9.33, reflects a relatively homogenous group with enough variability to capture diverse life experiences. The participants' working status is evenly split (see Table 1), with half being working women and half non-working, ensuring a balanced perspective from both employed women and those managing households full-time. This balanced representation of different age groups and work

settings makes the study more robust and helps apply the findings to different types of women's experiences.

### Descriptive Statistical Analysis of Responses

**Table 2** – Results of Descriptive Analysis (Mean $\pm$ SD)

Dimensions	Pre-pandemic phase		During Lockdown		Post-Lockdown phase	
	Employed	Homemaker	Employed	Homemaker	Employed	Homemaker
Autonomy	14.49 $\pm$ 4.29	14.35 $\pm$ 4.12	13.91 $\pm$ 3.89	14.51 $\pm$ 4.16	14.85 $\pm$ 4.02	14.57 $\pm$ 4.13
Environmental Mastery	14.33 $\pm$ 3.97	14.83 $\pm$ 3.88	14.23 $\pm$ 3.89	14.48 $\pm$ 3.79	16.18 $\pm$ 3.10	16.63 $\pm$ 3.10
Personal Growth	16.57 $\pm$ 3.08	16.42 $\pm$ 3.05	16.71 $\pm$ 2.85	14.53 $\pm$ 4.01	14.43 $\pm$ 3.98	13.99 $\pm$ 4.09
Personal Relations	14.68 $\pm$ 4.21	14.21 $\pm$ 4.09	16.27 $\pm$ 3.05	14.89 $\pm$ 4.21	14.70 $\pm$ 4.08	14.30 $\pm$ 3.93
Life Purpose	16.77 $\pm$ 2.97	16.73 $\pm$ 2.77	16.14 $\pm$ 2.76	14.60 $\pm$ 4.05	17.10 $\pm$ 2.78	16.18 $\pm$ 2.98
Self-Acceptance	16.38 $\pm$ 3.11	16.79 $\pm$ 2.93	16.89 $\pm$ 2.92	14.20 $\pm$ 4.03	16.59 $\pm$ 2.69	14.25 $\pm$ 4.37
<b>Mental Health</b>	<b>15.54<math>\pm</math>1.49</b>	<b>15.55<math>\pm</math>1.51</b>	<b>15.69<math>\pm</math>1.35</b>	<b>14.53<math>\pm</math>1.84</b>	<b>15.64<math>\pm</math>1.45</b>	<b>14.99<math>\pm</math>1.75</b>

The study examined mental health across three time periods: before the pandemic, during the lockdown, and after the lockdown (see Table 2). The results showed a clear difference between working women and non-working women. Before the pandemic, the mental health scores of the two groups of women were similar. Working women scored slightly higher in autonomy (14.49) and life purpose (16.77). Non-working women scored slightly higher in environmental mastery (14.83) and self-acceptance (16.79). These descriptive analysis results show that the mental health of both groups of women was relatively stable and comparable before the pandemic.

The lockdown period brought clear changes, especially for non-working women. Working women experienced slight declines in autonomy (13.91) and life purpose (16.14). Non-working women showed a significant drop in personal growth (14.53) and self-acceptance (14.20). Their overall mental health score went down to 14.53 from 15.55 before the pandemic. This shows that the lockdown affected non-working women more strongly, as shown in Table 2. Increased housework and being alone may have made them feel stuck and less positive about themselves.

In the post-lockdown period, mental health started to improve for both groups. Working women showed better scores in autonomy (14.85) and environmental mastery (16.18). This means they may have felt more in control as routines returned. Non-working women also improved in life purpose (16.18) and environmental mastery (16.63). But they still had low scores in personal

growth (13.99) and self-acceptance (14.25). Overall, both groups had lower mental health than before the pandemic, especially non-working women.

### Inferential Statistical Analysis of Responses

**Table 3** – Results of Inferential Analysis (t-test)

Dimensions	Pre-pandemic phase		During Lockdown		Post-Lockdown phase	
	t-score	p-value	t-score	p-value	t-score	p-value
Autonomy	0.27	0.791	-1.12	0.267	0.52	0.607
Environmental Mastery	-0.98	0.328	-0.49	0.627	-1.18	0.242
Personal Growth	0.39	0.697	4.81	0.000	0.85	0.398
Personal Relations	0.89	0.375	2.97	0.004	0.77	0.441
Life Purpose	0.11	0.913	3.56	0.001	2.50	0.014
Self-Acceptance	-1.07	0.289	6.32	0.000	4.80	0.000
<b>Mental Health</b>	<b>-0.10</b>	<b>0.924</b>	<b>5.66</b>	<b>0.000</b>	<b>3.17</b>	<b>0.002</b>

The inferential analysis compared mental health dimensions of working and non-working women across three periods—pre-pandemic, during the lockdown, and after the lockdown (refer to Table 3). It provides valuable insights into how each group experienced and responded to the pandemic's challenges. The analysis used paired samples t-tests to assess the significance of changes in each dimension.

**Autonomy:** The t-scores for this dimension across all three periods (0.27, -1.12, 0.52) had p-values greater than 0.05, as shown in Table 3. This indicates that there were no statistically significant differences in autonomy between working women and non-working women throughout the pandemic. Both groups maintained a relatively stable sense of autonomy regardless of their employment status. This remained true even during the disruptive lockdown period. This finding supports the broader understanding that autonomy is a stable psychosocial construct. It may not be easily influenced by external circumstances, even during a global pandemic (Gomez et al., 2022; Mockaitis et al., 2022). The stability in autonomy may be due to the resilience and adaptive capacities of both working and non-working women. These capacities allowed them to maintain their sense of self-governance during the pandemic (Gomez et al., 2022).

**Environmental Mastery:** This dimension measures a person's ability to manage their environment effectively. The t-scores for this dimension were negative across all three periods (-0.98, -0.49, -1.18), with p-values above 0.05 (see Table 3). These results show no significant differences between working and non-working women in their ability to control their environment during the pandemic. Both groups likely faced similar challenges when adapting to the rapidly changing conditions. These included transitioning to remote work or managing household responsibilities under lockdown (Jaiswal & Arun, 2024). The shared difficulties may explain the

lack of significant differences. Both groups likely experienced similar levels of stress and uncertainty. This may have reduced any potential disparities in environmental mastery.

**Personal Growth:** This dimension showed a significant positive change during the lockdown. The t-score was 4.81 with a p-value of 0.000, indicating a statistically significant difference between working and non-working women. During the lockdown, working women may have experienced more personal growth than non-working women. This could be due to the challenges and opportunities brought by remote work or the need to balance work and home life. This finding is consistent with the study by Giusti et al. (2023). Their research suggests that working women may develop new skills, gain confidence, and reach personal milestones when faced with challenges. These achievements can improve their psychosocial well-being. Before and after the lockdown, the changes in personal growth were not significant. This means the biggest differences appeared during the lockdown. These results show that crisis situations may act as catalysts for personal growth, especially for those in the workforce.

**Personal Relations:** A significant positive change was observed in this domain during the lockdown. The t-score was 2.97 and the p-value was 0.004. This means working women might have experienced a greater improvement in their relationships compared to non-working women. One reason could be the increased time spent at home during the lockdown. The unique conditions of the lockdown allowed working women to engage more with family members. Despite professional duties, they had more opportunities to nurture relationships (Mahato & Jha, 2022). The t-scores before and after the lockdown were 0.89 and 0.77, with p-values of 0.375 and 0.441. These non-significant values show that the improvement in relationships was specific to the lockdown period.

**Life Purpose:** This dimension showed a significant positive change during and after the lockdown. The t-scores were 3.56 and 2.50, with p-values of 0.001 and 0.014, respectively, as shown in Table 3. These findings suggest that working women may have developed a stronger sense of life purpose than non-working women during these times. This sense of purpose could have been strengthened by balancing work and home responsibilities in a time of crisis. This aligns with resilience theory. The theory suggests that people involved in purposeful activities are better able to handle stress and uncertainty (Sayed et al., 2024). The sustained sense of life purpose even after the lockdown shows that the pandemic may have had a long-lasting impact. This impact seems to have positively influenced the psychosocial well-being of working women in Kota City.

**Self-Acceptance:** This dimension showed the most significant differences between working and non-working women. These differences were especially clear during and after the lockdown. The t-score during the lockdown was 6.32 and after the lockdown, it was 4.80. Both had p-values of 0.000, indicating highly significant differences (see Table 3). Working women likely experienced greater self-acceptance during these periods. Before the lockdown, the t-score was -1.07 with a p-value of 0.289, which shows no significant difference. This suggests that the pandemic gave working women opportunities for reflection and self-acceptance. These opportunities were likely less available to non-working women. Previous research also supports this idea. Prior studies (such

as Jaiswal & Arun, 2024; Malik et al., 2024) found that employment can help individuals discover themselves and feel validated, especially during crises. This contributes to overall mental health.

**Overall Mental Health:** This was measured as a composite score. It improved for working women. The improvement was significant during and after the lockdown. The t-scores were 5.66 and 3.17, with p-values of 0.000 and 0.002 (see Table 3). These results support Stress Theory. The theory suggests that people with more psychosocial resources can better handle stress. For working women, employment may have served as a protective factor. It likely gave them structure, purpose, social support, and a sense of achievement. These factors helped reduce the psychological impact of the pandemic. In contrast, non-working women may have faced greater isolation and fewer support systems. This may have led to larger declines in their mental health. These findings highlight the important role employment plays in managing stress and building resilience. They show how access to psychosocial resources helps people cope with severe challenges (Magorokosho et al., 2024; Malik et al., 2024).

## Conclusion

The study examined the mental health impacts of the COVID-19 lockdown on working women in Kota City, India. It focused on comparing their experiences to those of non-working women. The findings are consistent with Stress Theory. They show that the build-up of stress during the pandemic led to different mental health challenges for different groups of women. Working women showed vulnerabilities in areas such as autonomy and personal growth. However, they also showed resilience, especially in life purpose and personal relationships. This resilience was likely due to the psychosocial resources that employment provides. In contrast, non-working women had fewer structured supports and experienced more isolation. As a result, they faced stronger negative effects, particularly in self-acceptance and overall mental health.

These findings highlight the unequal effects of stress. They also emphasize the need for targeted support that strengthens coping skills and psychosocial resources for both working and non-working women during crises. Stress Theory supports these conclusions. It helps explain why mental health outcomes were different for different groups. This shows the need to understand how stress builds up and affects people in different ways.

Moreover, the mental health challenges faced by working and non-working women in Kota during crises such as the COVID-19 pandemic are likely to show similar patterns elsewhere. As such, the findings of this study can be generalized across regions and industries to support women's mental health and well-being, especially during times of crisis. Thus, these findings can be applied beyond Kota, as many urban and semi-urban areas in India and around the world share similar socioeconomic and cultural conditions that shape women's lives.

However, the study has some limitations. It focused only on one urban area, which may not represent other regions. It also relied on self-reported data, which could lead to bias. The study used a cross-sectional design. This limits its ability to show cause-and-effect relationships. The small sample size also limits the general applicability of the results. Future research should include a larger sample. It should also use longitudinal methods to track changes in mental health over time.

Researchers should also examine whether the mental health impacts continue or change after the pandemic. They should explore differences across regions or demographic groups. Qualitative studies could give deeper insights into the struggles and coping strategies of working women. Studying digital tools and remote work may also help create better support systems for mental well-being in future crises.

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