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Beyond (COVID-19) Lockdown: Faculty Experiences in the Post-**Pandemic Academic Landscape**

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- 12
- 13 Keywords: Work-family conflict, Job satisfaction, Higher Education, Post-pandemic, Internet Use.

14 Abstract

- 15 Background: This study investigates the nuanced experiences of faculty members in higher
- education institutions during and after the COVID-19 pandemic. Focusing on family-work conflict, 16
- job satisfaction, and personal wellbeing, the research aims to provide comprehensive insights into the 17
- 18 challenges and adaptations encountered by faculty members amidst unprecedented disruptions.
- 19 Method: A mixed-method approach was employed, encompassing both quantitative and qualitative
- 20 measures. The quantitative facet involved 82 participants who responded surveys distributed to
- faculty members across diverse regions of India. Concurrently, qualitative data were collected 21
- 22 through interviews with 30 faculty members in three states. The quantitative study utilized
- 23 standardized tools, while the qualitative inquiry followed a semi-structured interview schedule.
- 24 **Result:** Quantitative findings revealed a significant upswing in job satisfaction after institutional
- 25 reopening compared to the lockdown period. However, no significant differences were observed
- concerning work-family conflict and personal wellbeing. Notably, faculty members reported 26
- 27 heightened work-family and family-work interference compared to national statistics. Qualitative
- 28 responses highlight a notable shift in teaching methodologies, incorporating multimedia and online 29 tools. Faculty members exhibited mixed sentiments about returning to the office, expressed a
- 30 deepened appreciation for social relationships post-reopening, and emphasized the positive impact of
- 31 institutional hygiene protocols.
- 32 **Conclusion:** This study offers crucial insights into the multifaceted experiences of faculty members
- 33 in higher institutions during the COVID-19 lockdown and subsequent reopening. The research
- 34 contributes valuable perspectives to the evolving discourse on post-pandemic academia, providing a
- 35 foundation for further exploration and understanding of the challenges and opportunities faced by
- 36 faculty members in the changing scenario of higher education.

37 Article types

38 Original Research Article

39 **1. Introduction**

40 In March 2020, the world experienced unprecedented uncertainty, with one of the significant 41 concerns being the disruption of the teaching-learning process due to the COVID-19 pandemic. According to the World Bank (2022), the global impact was extensive, affecting the education of 42 43 approximately 1.6 billion students across 180 countries. In response, India decided to close all 44 educational institutions in March 2020 and implement remote learning through digital platforms. This shift presented new challenges for teachers worldwide, particularly in higher 45 education(Neuwirth, Jović and Mukherji, 2020). First, it tested teachers' proficiency in computer and 46 47 information technology, revealing a dissatisfactory status despite specific policies governing the use 48 of information communication technologies in the Indian higher education system (Mukhopadhyay 49 and Parhar, 2014; Irrinki, 2021). Second, the preparation of online materials, especially in non-50 English languages, proved to be a daunting task. Issues such as the lack of necessary internet 51 connectivity and smart devices added to teachers' dissatisfaction with online education (Daval, 2023; 52 Singh, Gupta and Yadav, 2023). Third, teachers found themselves with the ethical responsibility of 53 delivering teaching at their own expense, covering costs for the internet, digital materials, equipment, 54 and even fees for acquiring new online/digital skills. Fourth, due to a shortage of staff, many administrative responsibilities were shouldered by teachers alongside their teaching duties (Rawal, 55

56 2021; Christian, Sutariya and Kagathra, 2022), ranging from syllabus completion to result

57 preparation. Certainly, it has impacted teachers' well-being adversely.

58 The importance of a teacher's well-being cannot be overstated, as it plays a crucial role in their 59 performance in the classroom. A teacher's mental and physical health has a significant impact on 60 their ability to establish a positive learning environment, encourage student participation, and offer 61 effective support(Harding et al., 2019). Considering this, promoting teacher well-being is essential for the success of the educational system and the well-being of students (Evans et al., 2022). Teaching 62 63 is widely acknowledged to be a demanding profession, often leading to high levels of burnout and 64 attrition rates(Gadermann et al., 2023). However, the unprecedented and far-reaching modifications 65 brought on by the pandemic have further compounded the already-stressful nature of the job. Studies on teacher mental health during the COVID-19 pandemic have revealed elevated levels of stress and 66 emotional depletion among educators across several nations(Sokal, Trudel and Babb, 2020; Ozamiz-67 68 Etxebarria, Berasategi Santxo, et al., 2021; Silva et al., 2021). A notable proportion of teachers 69 experienced physical symptoms such as neck pain, back pain, headaches, and eyestrain. Additionally, 70 they are faced with psychological issues including stress, anxiety and loneliness, attributed to the demands of online teaching(Dayal, 2023). Variables such as gender, age, job stability, the 71 72 educational level at which they taught, and parental status negatively impacted their teaching 73 efficiency (Ozamiz-Etxebarria, Idoiaga Mondragon, et al., 2021; Besser, Lotem and Zeigler-Hill, 74 2022). Overall, their enthusiasm for teaching was adversely affected by COVID-19 pandemic (Voss

75 *et al.*, 2023).

76 The COVID-19 pandemic compelled most office-based professionals to transition to remote work, a

trend that persists across various sectors(Bick, Blandin and Mertens, 2023). This transformation

emphasizes the enduring impact of the pandemic on traditional work arrangements(Galanti *et al.*,

2021). It is intuitive, as well as proven in numerous studies(Byron, 2005), that while staying at home,

80 performing both home and office duties may interfere with each other. Work-family conflict refers to

81 the challenge individuals face when the demands and responsibilities of their work role interfere with 82 their family or personal life, and vice versa(Frone, Yardley and Markel, 1997). When employment demands infiltrate family functioning, and family obligations encroach upon the workplace, it gives 83 84 rise to significant work-family conflict (WFC) and family-work conflict (FWC) respectively. It involves a struggle to balance the requirements of work and family responsibilities, leading to stress 85 and potential negative impacts on both domains(Strandh and Nordenmark, 2006). Similar to other 86 87 professionals, teachers encountered the challenge of adjusting to shifts in their families and personal 88 lives alongside changes in educational activities (Erdamar and Demirel, 2014; Solís García, Lago 89 Urbano and Real Castelao, 2021). Reports from various countries, including India, highlighted 90 alterations in work patterns and family activities among teachers during the COVID-19 pandemic. 91 These studies suggested that the duration of teaching and other academic work increased during 92 COVID-19, leading to disruptions in family and social relationships (Schmidt-Crawford, Thompson 93 and Lindstrom, 2021; Dayal, 2023). Studies in Western countries indicated that job stress, family 94 conflict, and poor mental health are interconnected. WFC has been identified as a source of decreased 95 well-being in several studies, some research has also highlighted the negative impact of FWC on 96 well-being, transcending cultural boundaries(Lu et al., 2006). In a study involving 12,461 married or 97 cohabiting individuals employed in Swedish organizations, researchers explored the relationships 98 between various factors and mental well-being. Though results revealed significant associations with 99 psychosocial working conditions, family circumstances, and WFC, it was WFC that emerged as the 100 most influential factor in mental well-being (Nordenmark, Almén and Vinberg, 2020). Specific to the 101 teaching community, Toprak et al. (2022) found that work-family conflict heightened teachers' job 102 stress. An Australian study with a large sample of university employees has reported that after 103 considering job demands, the presence of work-family conflict significantly contributed to explaining 104 the variability observed in both physical symptoms and psychological strain among individuals (Winefield, Boyd and Winefield, 2014). Zhao et al. (2022) identified that work-family conflict 105 106 mediated the relationship between job stress and job burnout, with an individual's self-efficacy for

107 work-family playing a moderating role in this relationship.

108 To overcome the challenges posed by COVID-19 and maintain a semblance of normalcy, many 109 employees transformed their homes into offices. However, this adaptation came at the cost of several compromises, with job satisfaction being one of them(Martin, Hauret and Fuhrer, 2022). While the 110 111 shift to home offices or remote work situations has been challenging for many, leading to diminished 112 well-being and a poor balance between home and family responsibilities, some argue that there may 113 be a bright side. Previous research has presented evidence that the primary benefits of teleworking 114 from home include increased flexibility and autonomy(Harpaz, 2002; Diab-Bahman and Al-Enzi, 115 2020). Thus some studies found that employees were satisfied under remote or teleworking(Ahmadi 116 et al., 2022; Karácsony, 2021; Prodanova and Kocarev, 2022). However, job satisfaction during 117 COVID-19 depended on several factors (such as longevity, home workspace space, autonomy, digital social support, and monitoring mechanisms) (Petcu et al., 2021; Sousa-Uva et al., 2021; Yu and Wu, 118 119 2021), if these were not catered it resulted in poor job satisfaction(Feng and Savani, 2020; 120 Balasundarn et al., 2021). Furthermore, several previous studies had found that decreased job 121 satisfaction was associated with WFC and FWC (Kalliath and Kalliath, 2015) including poor well-122 being of the workers(Armstrong, Atkin-Plunk and Wells, 2015; Haji Matarsat, Rahman and Abdul-123 Mumin, 2021; Lim et al., 2021). Among Indian social workers, a positive relationship exists between 124 work and family aspects. When social workers experience an improvement in their work-life balance, 125 it correlates with higher levels of job well-being. Additionally, this positive impact extends further, 126 leading to increased job satisfaction, especially when there is strong support from their 127 families(Kalliath et al., 2019). A similar result was also seen in the Information Technology sector in 128 India, where WFC and FWC predicted job satisfaction and well-being of the employees(Aboobaker

- and Edward, 2017). Therefore, it can be concluded that there is a close association between well-
- 130 being, work-family conflict (including family-work conflict), and job satisfaction. Similar to other
- 131 work sectors, these variables are equally crucial for understanding the work experience of the
- 132 teaching community(Rahman *et al.*, 2020).

133 After being closed since March 2020, institutes of higher education in India reopened for academic

- activities in physical mode in the second week of February 2022. Contrary to the expectation of
- normalization and reduction in the negative impact caused by COVID-19, teachers initially showed
- fear of contamination, other health-related concerns, and family and work-related concerns in
 different parts of the world (Wakui *et al.*, 2021; Ryan *et al.*, 2023). A qualitative survey of Australian
- 138 teachers (Ryan *et al.*, 2023) reported increased workload and diminished well-being. Policy
- 139 implementation, seen as inconsistent and burdensome, made teachers feel like 'guinea pigs' in the
- 140 government's public health response. This frustration was evident as teachers faced strict isolation
- 141 rules in their private lives but had to teach in-person, facing challenges such as inadequate hygiene
- 142 measures and uncertain transmission risks from children. However, it is not clear whether almost one
- 143 and half years after the reopening of the educational institutions, which were shut down due to
- 144 COVID-19, what amount of normalcy has prevailed among teachers.
- 145 In this study, we aimed to investigate the experiences of faculty members in higher education in India
- 146 during the COVID-19 institutional shutdown and reopening. Our review revealed a gap in the
- 147 literature, with most studies focusing on the experiences of teachers in elementary or school levels,
- 148 while the experiences of faculty in higher education (i.e., college and university levels) remain
- 149 largely unexplored. While some studies have probed into teachers' experiences after reopening
- 150 (Wakui et al., 2021; Awwad-Tabry, Kfir, et al., 2023; Awwad-Tabry, Levkovich, et al., 2023; Ryan
- *et al.*, 2023) the duration of observation in these studies did not exceed six months. This limited
- timeframe might be a contributing factor to the continued reporting of negative impacts by a
- significant portion of the teaching faculty. Thus, this study was guided by following research
- 154 questions:
- 155 Research Question 1. Have there been any significant differences in personal well-being,
- family-work interference, and job satisfaction among faculty members in higher education after
 institutional reopening compared to the COVID-19 imposed closure?
- Research Question 2. What are the subjective experiences of faculty members regarding postlockdown work changes and challenges, work-life balance after returning to the office, the impact of the pandemic on work and career outlook, post-lockdown psychological status and coping, the institution's adaptation to the post-lockdown work environment, and post-pandemic future work perspectives and views on remote work?
- 102 Inture work perspectives and views on remote work?
- The COVID-19 pandemic led to a surge in online studies due to restrictions on physical contact and the convenience of distributing survey instruments digitally (Hlatshwako et al., 2021). Following this trend, our study was also designed to collect data online. However, online data collection has its drawbacks; it is susceptible to selection bias (De Man et al., 2021), careless responses (Jones et al., 2022), and low response rates (Yu et al., 2022). These limitations of the online data collections prompted us our next research question about faculty experiences with online surveys.
- 169 Research Question 3: What was the faculty members' experience with online surveys?
- 170

171 2. Methodology

172 2.1. Research Design

- 173 The findings from mixed-method research studies tend to be more comprehensive than those from
- 174 studies using a single method (Wisdom et al., 2012), it provides the advantage of covering the
- 175 complexity of the phenomena that cannot be tackled by a single method alone (Östlund et al., 2011).
- 176 In the scenario, when quantitative and qualitative data don't match, it's an opportunity to dig deeper
- 177 into each set and get stronger results (Moffatt et al., 2006). A Convergent Parallel Design is a type of
- 178 mixed-methods research design in which qualitative and quantitative data are collected concurrently 179 but analyzed separately (Creswell and Clark, 2011). The goal is to compare or corroborate findings
- 180 from both types of data to provide a comprehensive understanding of the research problem. Hence,
- 181 looking at its advantages, and for a deeper understanding of the experience of the faculty members, a
- 182
- convergent parallel mixed-method approach was adopted in this study.

183 2.2. Participants and Sampling

184 The targeted sample for this study was faculty members who were regular (permanent) employees

- and were working at least two years before the COVID-19 pandemic (i.e., must have been employed 185
- 186 since 2018 or before) in institutes of higher education (i.e., universities). For the quantitative phase of
- 187 data collection, one public university was randomly drawn for sampling across all states of India
- from the list given on the website of the University Grant Commission (regularity bodies of Indian 188
- 189 universities). Then, the email addresses of the faculty members were searched on the websites of the
- 190 selected universities. Some states (union territory) have only one university and, in some cases, the
- details of the faculty members were not available on the university website. In the case where the 191
- 192 email addresses of the faculty members were not given on the website, another university was drawn 193 for those particular states. Hence, faculties of 31 universities from 31 states and union territories in
- 194 India were invited to participate in this study through emails.
- 195 For the qualitative inquiry, 10 faculty members who responded to the quantitative measures and 20
- 196 new faculty members were contacted in person or via telephone. All the contacted faculty members
- 197 responded positively and all the thirty faculty members were then interviewed.
- 198 2.3. Measures

199 2.3.1. Work-Family Conflict Scale (ISSP) (Brever and Bluemke, 2016)

200 This scale measures the extent of conflicting interests between work and family life. It is four items 201 rating scale with 4-point rating categories labeled as 1 = "several times a week", 2 = "several times a month", 3 = "once or twice", and 4 = "never". There are two items for work-family (WF) conflict 202 203 because of the negative impact of work on family life and the other two items are for conflict because 204 of the negative impact of family life on work (FW). Items were reverse scored such that higher scores represent higher conflict. Reliability (Cronbach's alpha) ranges for this scale and subscales between 205 206 .50 to .94 across samples of different countries as reported by Breyer and Bluemke (2016). Validity 207 of the scale was established through criterion validity (e.g., female gender, working hours, negative impact on family and health). In this study, Cronbach's alpha was .78 and .75 for WF and FW during 208 209 the lockdown phase, and .82 and .86 for WF and FW after reopening, respectively.

210 2.3.2. The Generic Job Satisfaction Scale (Macdonald and MacIntyre, 1997)

- 211 The generic job satisfaction scale measures various facets of job satisfaction, including aspects such
- as job stress, boredom, isolation, and danger of illness or injury. It is 10 items rating scale with 5-
- 213 point rating categories labeled as 1 = "strongly disagree", 2 = "disagree", 3 = "don't know", 4 =
- 214 "agree" and 5 = "strongly agree". The total score is interpreted such that higher scores represent
- higher job satisfaction. Cronbach's alpha for these items was .77 during the development of the scale.
- Criterion (i.e., correlation with job stress, boredom, isolation, and danger of illness or injury) validity
- for this scale was established. In this study, Cronbach's alpha was .89 during the lockdown phase and
- 218 .92 after reopening.
- 219 2.3.3. Personal Well-being (Cummins et al., 2003)
- 220 Participants' personal well-being was assessed using the Australian Unity Index of Subjective Well-
- Being. Participants responded to the question "How satisfied are you with...?" in seven domain-
- specific areas of satisfaction (standard of living, health, achievement in life, personal relationships,
- 223 how safe you feel, community connectedness, and future security) using a scale of zero to 10 (0 =
- 224 Completely Dissatisfied to 10= Completely Satisfied). Cronbach's alpha was .95 in both the
- 225 conditions during the lockdown phase and after reopening in this study.

226 2.3.4. Semi-structured Interview

- The qualitative inquiry was guided by a semi-structured interview consisting of seven questions. Thequestions are:
- 229 Q.1: How has your work style and routine changed since the lockdown restrictions were lifted? Have
- 230 you found it difficult to transition back to work in the office setting? What challenges have you 231 faced?
- 232 Q.2: How have you maintained work-life balance after returning to the office?
- 233 Q. 3: How has the pandemic affected your overall outlook of work and career goals?
- Q.4: Have you noticed any changes in your mood or stress levels since returning to your office? Howhave you managed this situation?
- Q.5 How has your institution adapted to the changing work environment post-lockdown? What newpolicies and initiatives have been implemented?
- Q.6. What do you think the future of work looks like post-pandemic? Do you think that remote workwill continue to be prevalent?
- 240 Q.7: Have you refused any request to be a respondent to an online survey? If yes, what is your 241 opinion? What makes faculty members respond to this?

242 **2.4. Procedure**

- 243 To collect quantitative data, general information about the study, consent forms, and questionnaires
- 244 were prepared in Google Form. This form was circulated by email. The first section of the form
- 245 included general details of the study and information about the researcher. Interested faculty
- 246 members would read the consent form and provide consent by clicking the designated tab. Afterward,
- they proceeded to the participant information page and the questionnaire page one by one. We aimed

- to collect information on measures (work-family conflict, job satisfaction, and personal wellbeing)
- 249 during the COVID-19 imposed lockdown when all the educational institutes were shut along with
- 250 information on the same measures after reopening of the institutions in physical mode. Thus,
- 251 instructions and some of the items of the measures were modified and converted in the past tense. For
- example, the instruction "Recall your experience during the COVID-19 Lockdown Period (roughly
 between March 2020- February 2022) when your academic activities were not physically operational
- and answer the below given questions" was used to collect the information on measures during the
- 254 and answer the below given questions was used to confect the information on measures during the 255 COVID-19 imposed lockdown; whereas instruction- "Answer below given questions on the basis of
- 256 your experience in last 10-12 months" was used to collect the information after reopening of the
- institutions in physical mode. The data collection took place between January 2023 and April 2023.
- 258 For qualitative inquiry, interviews were conducted by the first three authors in their respective states
- through one-to-one contact. Initially, participants were contacted telephonically to inquire about their
- 260 readiness to participate. All contacted participants agreed to participate, and the interviews were
- 261 conducted in their agreed places (i.e., office in all cases). The interviews were tape-recorded and
- transcribed later for further evaluation by the respective authors.
- 263 Informed consent was obtained from all the participants for inclusion before they participated in the
- study. The study was conducted in accordance with the Declaration of Helsinki, and the protocol was
- approved by the Research Ethics and Publication Committee, S.N. Sinha College, Jehanabad, Bihar
- 266 (INDIA) (Ref. No.: RP/01/SNSC).

267 2.5. Data Analysis

- 268 Quantitative data were analyzed using IBM SPSS Statistics for Windows version 21.0. Transcribed
- 269 interviews were thematically analyzed following the guidelines outlined by Braun and Clarke (2006).
- 270 This involved familiarizing ourselves with the data, generating initial codes, identifying themes,
- 271 reviewing the themes, and defining and naming the themes before producing the report.

3. Results

273 **3.1. Quantitative Data**

Out of the 3987 emails sent to the faculty members, 379 could not be delivered due to various

reasons, such as incorrect email IDs or being blocked by email domains. Therefore, out of the 3608

emails that were successfully delivered, responses were obtained from only 82 faculty members of 25

- states, resulting in a turnout of 2.27%. These complete responses were collected from 82 faculties,
- out of which 48 (58.5%) were male. These faculty members held different positions: 50 (61%) were
- assistant professors, 18 (22%) were associate professors, and 14 (17%) were full professors. They
- belonged to diverse disciplines: 37 (45%) were from Arts, 9 (11%) from Engineering, and 36 (44%) from Science. The participants' ages ranged between 28 and 63 years, with a mean age of 44.46 (SD
- 7.61). Regarding their experience as faculty, it varied between 48 months (4 years) and 420 months
- 283 (35 years), with a mean experience of 177.94 months (SD 101).
- 284 Pearson's correlation coefficient (Table 1) for all the measured variables [viz., personal well-being
- 285 (PWB), work interference with family (WF), family interference with work (FW), job satisfaction]
- between lockdown phase and after reopening of the institutions was significantly high ($r \ge .70$,
- p<.01). Personal well-being was significantly negatively correlated with WF and FW both during the
- 288 lockdown phase and after reopening. Conversely, as expected, personal well-being was significantly
- 289 positively correlated with job satisfaction during both the lockdown phase and after reopening.

290	[Insert Table 1. here]						
291 292 293 294	Comparison between the lockdown and reopening phase on PWB index, WF, FW, and job satisfaction suggest that there was a significant difference only in job satisfaction (Table 1). Job satisfaction was high after reopening (mean 39.34) compared to the lockdown phase (mean 38.16) [t = -3.43 , p< .01].						
295	[Insert Table 2. here]						
296 297 298 299	As population statistics were available for work-family conflict from Breyer and Bluemke (2016), we also compared our sample participants with national data using z-test (Table 2). Result suggests that work-family conflict was significantly inflated among faculty members, compared to national data, during lockdown as well as after reopening.						
300	[Insert Table 3. here]						
301	3.2. Qualitative Inquiry						
302 303 304 305 306 307 308	Total 30 faculty members [17 (57%) female] were interviewed, who were working in different positions [15 (50%) assistant professors, 9 (30%) associate professors and 6 (20%) full professors] and were from three Indian states [7 (23%) from Nagaland, 8 (26%) from Bihar and 15 (50%) from West Bengal]. The age of the participants ranged between 26 and 60 years [mean 42.77 (SD 9.31)]. Initial themes and subthemes, derived from the qualitative inquiry conducted on seven questions (further details provided in Supplementary Table 1), are represented in seven major themes outlined below.						
309 310 311 312 313 314	Acceptance of the shift in teaching methods. Most participants (70%) felt that their use of multimedia and information communication technologies (e.g., PowerPoint presentation: PPT and use of Internet available or self-made video tutorials) increased significantly. All these measures which they adopted during the COVID-19 lockdown, due to the closing of educational institutions in physical mode, to continue the teaching-learning process actually have now taken the form of 'habit' as one of the participants (female, assistant professor, 28 years old) expressed it:						
315 316 317 318 319	"During the COVID situation, I used to teach students through PowerPoint presentations, and after this COVID, I found myself using the same PPTs in the classroom. Sometimes, I think that why I am using the same PPT, I should teach the students in more interactive ways and should use PPT less, but the habit of using PPT and online teaching is still sustaining. Now I am in the habit that before classes I should have PPT in my hand."						
320 321 322	Participants expressed the need to be well-equipped to address students' diverse needs and enhance their skills in a formidable position. Feeling unrecognized during the pandemic expressed a desire for career enhancement and growth, and suggested their preparations for academic recognition.						
323 324 325	<i>Mixed emotions and adaptation towards reopening.</i> Participants (47%) highlighted increased stress levels, anxiety, and mood swings during the lockdown. This is generally related to strict university regulations and increased family responsibilities. One male associate professor (47 years) said-						
326 327	"We were trying our best, dealing with challenges moment by moment, without dwelling too much on the future. Simultaneously, we felt a significant responsibility to complete academic and						

- 328 administrative assignments within the given timeframe, ensuring that service delivery reached the
- 329 stakeholders. After reopening, in the physical mode, my stress level is not above normal."
- 330 Participants experienced low stress levels because of a healthy work environment and positive
- relationships with colleagues. They found support from institutions and colleagues, which reduced
- 332 stress, indicating the impact of a supportive work atmosphere. They also learned from others'
- 333 effective stress management, motivating them to overcome stress.
- Many participants (80%) expressed that although they had adapted technology-based teaching and
- learning methods, which had eased their teaching, they felt that it had made their classes less
- interactive. They have adapted to new schedules post-lockdown and appreciated the return to official
- 337 working hours, contrasting the uncertainties during the lockdown period; however, they found an
- increased workload at the workplace. They also expressed relief that, after reopening of the
- institution, their work schedule was more predictable. However, they are still apprehensive about
- 340 contamination, and concerns regarding hygiene and cleanliness have significantly increased.
- The participants (40%) also experienced changes in their social dynamics. COVID-19 imposed
- lockdown gave them the opportunity to re-establish, strengthen, and re-explore their family and
- 343 social relationships, which were now missing after reopening.
- 344 Use of various organizational strategies to balance work-life. One of the female assistant professors
- (32 years) said, "I think our kids also get adapted to the fact that mother works, office work, at home. So yes, with the support of family and adjustment from the part of everyone – kids, spouse, self – I
- think somehow the work-life balance is there. But yes, sometimes I do feel overwhelmed."
- 348 The experiences regarding work-life balance after returning to the office varied widely. Challenges
- arise from changes in routines, commuting difficulties, and the psychological toll of balancing
- 350 multiple responsibilities. Strategies such as organizational skills (time scheduling and diary
- 351 maintenance), multitasking, and family support play essential roles.
- 352 "Now it is easy to maintain work like balance because I and my family know what are the different
- 353 roles they can expect and what are the different time frame they can expect for me. During lock
- down, I was doing all sorts of work in my home apart from my official work." (Assistant Professor,
- 355 Male, 40 years).
- Appreciation for work and human connections. The participants (70%) highlighted a newfound appreciation for their work and human connections. The pandemic has made them value the working culture, students, and interpersonal relationships more deeply. The subject specifically mentioned the realization of being a social animal and appreciating interactions and relationships. A female faculty from the north-east reflected-
- 361 "In (name of the place is masked), the lockdown felt like an unprecedented experience, akin to being
- 362 confined in a jail. Although many people worldwide face daily challenges, this situation has
- 363 profoundly affected us. Personally, it has transformed my perspective, fostered empathy and
- understanding. Now I have come to the realization that, in one word, we are social animals. I now
- realize the profound truth that humans are inherently social beings; we cannot thrive in closed
- 366 confines. This experience has deepened my appreciation for interactions and relationships,
- 367 highlighting the fundamental importance of human connection."

- 368 *Post-lockdown hygiene measures and humanitarian efforts.* Hygiene practice has improved in all
 369 institutions compared with the pre-COVID-19 situation. The institution implemented strict hygiene
 370 measures, including hand sanitization, mask-wearing, and maintenance of a clean environment.
- 576 medsures, meruding hand samuzation, mask wearing, and maintenance of a crean environme.

371 "The humanitarian aspect was on another level, which honestly, I didn't know was part of our

teachers' agenda. The teachers really helped, and the authorities ensured that... Now, we have this, I

373 see... They were providing us with good, filtered drinking water [before COVID], but now they've

- 374 given us a cooler and better facilities, including new toilets for girls... So, all these changes happened
- because of the COVID situation; now they understand that hygiene is very important. The staff
- working area has also improved, so in a way, I can say that this COVID situation has changed us for the batter " (Famala, Associate Professor, 44)
- 377 the better." (Female, Associate Professor, 44)
- 378 Participants (70%) mentioned the institution's emphasis on mental health by providing counseling
- 379 services and resources through apps, demonstrating a proactive approach to supporting students'
- 380 mental well-being. As another 30 years old female assistant professor mentioned:
- 381 "In my personal opinion, the institution has adapted very well to the post-lockdown working
- 382 environment by implementing a student-friendly atmosphere, promoting awareness of personal
- 383 hygiene and mental health, and enforcing a stricter policy towards misbehavior. There's also a
- heightened emphasis on the academic performance of the students."
- 385 *Remote and hybrid work are there to stay long.* Institutions continued to implement the online 386 measures adopted during the lockdown period as an option for their faculty and students, as indicated 387 by 90% of the participants. Assignments, student attendance, and numerous classes are conducted 388 online, a practice highly valued by the participants due to the flexibility it offers, a feature lacking in 389 the physical mode.
- 390 The majority of the participants acknowledged that remote work and hybrid (partial online work)
- 391 work are likely to continue in some form post-pandemic. They pointed out the convenience, cost-
- 392 effectiveness, and opportunities it offers, particularly for individuals in remote areas and working
- 393 mothers. They highlighted that remote work has opened new opportunities and made work culture
- 394 more flexible, leading to continued growth.
- 395 "... I think in a way this pandemic has opened opportunities and also avenues for remote working,
- and people have learned and adapted. So, in a way new opportunities and new work culture have
- come up, and I think it is to be appreciated because that makes life more flexible," a male professor,answered.
- However, 70% of participants raised concerns about the effectiveness of remote work, emphasizingthat it might not be suitable for every employee or business.
- 401 *Time constraints and survey overloads.* Participants (47%) highlighted the inundation of online
- 402 surveys, indicating that a sheer number of requests can lead to selective participation. Time
- 403 constraints play a significant role in the decision-making processes. This reflects the challenges of
- 404 managing a busy schedule, especially in academia where faculty members often have multiple 405 commitments. A male assistant professor (32 years) expressed:
- 406 "To be completely honest, yes, I've simply ignored numerous requests for online surveys. There have
 407 been far too many of them, appearing in my inbox or in WhatsApp groups every other day. Yes, I've
- 408 responded to those sent by people I know, but the ones from unknown senders, I've ignored. I believe

- 409 many people lack the time or motivation to respond to all the surveys they receive, especially those
- from unfamiliar sources." 410
- 411 However, some (30%) participants indicated their selective approach based on the relevance of the
- 412 survey topic. If the subject matter aligns with their interests or expertise, they are more likely to
- 413 respond accordingly. This suggests that the perceived importance and relevance of the research topic
- 414 influence their participation decisions. A female assistant professor (40 years) shared her experience:
- 415 "I believe there have been occasions when I've said 'yes' and times when I've said 'no', perhaps
- depending on the subject matter. If the topic isn't necessarily of personal interest but something I can 416
- 417 contribute to, I've declined such surveys."
- 418 Some participants (30%) also refused to participate because of doubts about the survey's
- 419 methodology, consent forms, and information about the research. This highlights the importance of
- 420 transparent communication and clear explanations of the survey invitations. Faculty members, as
- 421 researchers themselves, are likely to scrutinize the research design and ethical aspects before
- 422 participating. It can be sensed from the expression of a male assistant professor (40 years):
- 423 "Yes, I have declined participation in online research surveys because most of the time I doubted
- 424 their methodology or found the consent forms and research information lacking in detail. Since the
- lockdown, our emails have been inundated with numerous messages daily, making it impossible to 425
- 426 reply to or read them all, so we must prioritize."

427 4. Discussion

- 428 In this study, we have used a mixed-method approach to understand the reflections of the faculty
- 429 members working in higher education on their experience with the COVID-19-imposed shutdown of
- 430 academic institutions and after the reopening of the academic institutions in physical mode. Eighty-
- 431 two faulty members' experiences on personal well-being index, work-family conflict, and job
- satisfaction were quantitatively measured with the help of standardized questionnaires for both the 432 433
- lockdown period and after reopening. Additionally, thirty faculty members shared their experiences
- 434 of post-COVID-19 institutions reopening while reflecting upon their COVID-19 lockdown
- 435 experiences in a semi-structured interview.
- 436 The study faced challenges in survey distribution, resulting in a low response rate of 2.27%. While 437 this rate raises concerns about representativeness, it is crucial to consider the context of academia 438 during and after the pandemic. In a survey involving 658 teachers and 945 students, 66.1% of the 439 respondents indicated their workplace as their primary location for internet usage, while only 19% 440 reported using the internet at home (Kumar and Kaur, 2006). However, back then internet service 441 was not so prevalent in India. Additionally, research has shown that the enforcement of mandatory 442 stay-at-home and isolation policies amid the COVID-19 pandemic has led to increased dependence 443 on smartphones and the Internet. This heightened reliance has, in turn, given rise to problematic 444 internet usage, which has been linked to sleep disturbances and psychological distress among 445 teachers (Lee and Chen, 2021). As reported by faculty members in our study, they were inundated 446 with various commitments, along with several requests for participation in various online surveys, 447 which might have affected their interest and ability to engage in online research surveys 448 comprehensively. This argument is further supported by the fact that when they were requested in 449 person, they all volunteered to be a participant in this study.

450 High paired correlations for all constructs between lockdown and after reopening phases were 451 observed. It indicates a more precise estimate of the true difference between the group means (Moore and McCabe, 1989). Our study confirms the research findings of previous studies (Lu et al., 2006; 452 453 Nordenmark, Almén and Vinberg, 2020; Toprak, Tösten and Elcicek, 2022) in terms of negative correlation between personal well-being and work-family as well as family-work conflict. Moreover, 454 personal well-being was positively correlated to job satisfaction (Armstrong, Atkin-Plunk and Wells, 455 456 2015; Haji Matarsat, Rahman and Abdul-Mumin, 2021; Kalliath et al., 2019; Lim et al., 2021). 457 Interestingly, WFC during the lockdown phase was not correlated significantly with our participants' 458 job satisfaction at any phase (during the lockdown and after reopening). However, after reopening 459 WFC was significantly negatively correlated with job satisfaction after institutional reopening at both phases. For this, family support in performing official duties from home, until it was not interfering 460 with family responsibilities, may be the plausible reason. Acceptance of the teacher's role as an 461 462 institutional tied worker by the family members was expressed by the participants in the qualitative inquiry ("I think our kids also get adapted to the fact that mother works, office work, at home. So yes, 463 464 with the support of family and adjustment from the part of everyone - kids, spouse...," a female 465 assistant professor expressed). Contrary to this supporting scenario, when faculty members returned to 466 their respective workplaces, they found themselves burdened again with work responsibility interfering 467 with family. A male professor expressed:

468 "I am not able to manage my personal and office life has become a mess. Even after returning from the 469 office there are lot of official work which I have to do at my home. There is no space for myself."

470 Another female assistant professor expressed:

471 "...one good thing about the lockdown was that we were free from worries about leaving the kids at472 home when we were at work."

473 In a comprehensive elaboration, a female professor depicted a typical Indian home scenario:

474 "...now I have three children so [it is] like juggling along with them; their school work, my husband, 475 you know, and I have to keep my housekeeper happy also, that's also a work okay, and my workplace 476 and now because of this new educational policy again everything has changed. So, you know, 477 sometimes it's very difficult obviously, I am stressed out, and you know, I am in a tense situation..."

- Thus, for the collective conscious Indians family is of prime importance. The diluting role of family
 support in WFC to enhance job satisfaction has been also confirmed in previous studies(Kalliath *et al.*,
 2019).
- 481 Though studies have reported the negative impact of COVID-19 imposed lockdown on work-life 482 balance (Hjálmsdóttir and Bjarnadóttir, 2021; Lonska et al., 2021; Uddin, 2021; Adisa et al., 2022) psychological wellbeing (O'Connor et al., 2021; Hutchison et al., 2022) and job satisfaction (Hong, 483 484 Liu and Zhang, 2021; Yu and Wu, 2021). In our study, we did not find any significant change after 485 reopening in work-family conflict as well as the personal well-being of our participants. Quantitative 486 measure, however, suggests that work-family as well as family-work interference among faculty 487 members were significantly high compared to the national statistics. So, it might be the case that they 488 already had a work-family conflict, irrespective of the pandemic lockdown. The conflict between 489 work responsibility and family and vice versa among teaching professionals (Cinamon, Rich and 490 Westman, 2007; Erdamar and Demirel, 2014), especially for female teachers (Cinamon and Rich, 491 2005), is not new. However, to date in India, this aspect of university teachers has not been explored
- 492 well (Gopalan, Pattusamy and Gollakota, 2020). Our study has shown that work to family and family

- 493 to work, both the conflict levels are significantly higher among the university faculties. Their voice
- became clearer as they insisted, during the qualitative inquiry, that they faced challenges in
 maintaining work-life balance, especially, after returning to the office. As a curative measure, faculty
 members mentioned that family support played vital roles in their coping. The study emphasizes the
 importance of recognizing and addressing the psychological toll of balancing professional and
- 498 personal responsibilities, especially considering the evolving work dynamics.
- 499 A meta-analysis (Ozamiz-Etxebarria, Idoiaga Mondragon, *et al.*, 2021)suggested that the level of
- 500 anxiety, depression and stress were elevated among teachers during COVID-19, whereas Asian
- 501 teachers have more anxiety compared to the rest of the world. Our research revealed increased stress
- 502 levels, anxiety, and mood swings during the lockdown phase. However, after reopening, the stress
- 503 levels normalized for most participants due to a supportive work environment and positive
- relationships with colleagues. This highlights the critical role of social support and a conducive
- 505 workplace atmosphere in mitigating stressors.
- 506 Since COVID-19, online teaching has been made essential, especially, in higher education; it raised
- 507 concern over whether traditional faculty members are ready for this rapid transition (Cutri, Mena and
- 508 Whiting, 2020; Valsaraj *et al.*, 2021). Our qualitative inquiry suggests that there is a significant shift
- 509 in teaching methods, with 70% of participants embracing multimedia and online tools. This
- 510 adaptation, initiated during the lockdown, became habitual even after the reopening phase. While 511 these tools streamlined the teaching process, concerns were raised about reduced interactivity in
- 511 these tools streamlined the teaching process, concerns were raised about reduced interactivity in 512 classrooms. In the past, it was expected that mandatory transition to online teaching could be a major
- 512 classrooms. In the past, it was expected that mandatory transition to online teaching could be a majo 513 issue of stress for sincere teachers willing to deliver effective learning to the students (Crawford-
- 513 For and Wiest, 2012; Howard *et al.*, 2021). Faculty members in our study echoed the same and
- 515 indicated a need for balanced approaches in pedagogy.
- 516 While job satisfaction among teachers in some countries, like Turkey (Aktan and Toraman, 2022),
- 517 remained high during COVID-19, this may not hold for Indian teachers. Previous studies suggested
- 518 subaverage job satisfaction among Indian higher education teachers, ranging from poor to average
- 519 (Katoch, 2012; Nayak and Nayak, 2014; Tahir and Sajid, 2014). The pandemic appears to have
- 520 exacerbated this situation, with participants expressing a decline in job satisfaction, missing work
- 521 culture, feeling unrecognized, and facing hindrances in their career goals during lockdown. However,
- 522 post-reopening, they found support from institutions and colleagues, reducing stress and emphasizing
- 523 the positive impact of a supportive work environment.
- 524 This first attempt, capturing the COVID-19 pandemic and aftermath experiences of Indian faculty 525 members involved in the higher education system has some limitations. Though effort was made to
- 525 members involved in the higher education system has some limitations. Though effort was made to 526 get representation from every state, including union territories, of India, the response rate in our study
- 520 get representation from every state, including union territories, of India, the response rate in our stud 527 was very low. Previous research that employed email-based recruitment has similar findings
- 527 was very low. Previous research that employed email-based recruitment has similar findings 528 (Murphy *et al.*, 2020), whereas another research suggests a better response rate by email than postal
- 529 mail (Tai *et al.*, 2018). This limitation highlights the need for a cautious interpretation of the findings.
- 530 Despite these challenges, the study provides valuable insights into the complex interplay between
- 531 work dynamics, personal lives, and psychological well-being during and after the pandemic.
- 532 In our study, due to the small number of participants, we could not see the effect of faculty rank and
- 533 gender. It can be expected that work responsibilities may vary rank-wise (assistant, associate, and
- 534 professor). Similarly, work and family expectations may also differ between males and females. In
- 535 future research, these limitations should be overcome for a deeper understanding and the generality
- of the findings.

537 **5. Implications and future directions**

- 538 The study identified common reasons for faculty members' reluctance to participate in online
- 539 surveys, including time constraints, relevance, and methodological concerns. Addressing these
- issues, such as minimizing survey frequency and ensuring transparent communication about research
- 541 goals, could enhance future survey response rates.

542 Faculty members highly valued the implementation of rigorous hygiene protocols, which

significantly enhanced the safety of their work environment. Furthermore, institutions took proactive

544 steps to support mental health, offering counseling services and promoting a comprehensive

- 545 approach to faculty well-being. These measures and practices should be permanently integrated into
- 546 institutional frameworks, rather than being seen as temporary or precautionary initiatives.
- 547 The study participants expressed a mixed outlook regarding the future of work post-pandemic. While
- remote and hybrid work options were appreciated for their flexibility, concerns were raised about
- their effectiveness for all employees and businesses. Striking a balance between remote and physical
- work models emerged as a challenge, indicating the need for tailored approaches based on individual
- roles and preferences. Future research could explore targeted interventions to support faculty
- members' mental health and work-life balance. Investigating the long-term effects of the pandemic on
- academic productivity and collaboration could provide valuable insights for institutions aiming to
- create adaptive work environments.

555 6. Conclusion

- 556 In conclusion, this study sheds light on the multifaceted challenges faced by faculty members during
- the pandemic, emphasizing the importance of supportive work environments, adaptive teaching
- methodologies, and a holistic approach to well-being. Addressing these challenges can pave the way
- 559 for resilient and sustainable academic work practices in the post-pandemic era.

560 7. References

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- 808
- 809 Tables
- 810 **Table 1.**

811 Correlation among Measured Variables at lockdown phase and after reopening of the institutions

	PWB _{LD}	PWB _{RO}	WF _{LD}	WF _{RO}	FW _{LD}	FW _{RO}	$\mathrm{JS}_{\mathrm{LD}}$
PWB _{LD}	_						
PWB _{RO}	.88**	-					
WF_{LD}	37**	34**	_				
WF _{RO}	28*	30**	.70**	_			
$\mathrm{FW}_{\mathrm{LD}}$	55**	50**	.61**	.57**	-		
FW _{RO}	52**	48**	.45**	.58**	.74**	-	
$\mathrm{JS}_{\mathrm{LD}}$.73**	.72**	-0.21	29**	47**	50**	_
JS _{RO}	.64**	.66**	-0.16	33**	36**	50**	.89**

812 Note. LD: Lockdown Phase, RO: After Reopening, PWB: Personal Wellbeing, WF: work

813 interference with family, FW: family interference with work, JS: Job Satisfaction. **p<.01

814

- 815 **Table 2.**
- 816 *Comparison of study variables using parted t-test* (N = 82)*.*

	Lockdown Phase		Reopening	Phase	t(df= 81)	Level of Significance
	Mean	SD	Mean	SD		
PWB	50.74	14.15	51.95	12.65	-1.63	.108
WF	4.61	2.04	4.54	1.89	.43	.666
FW	3.72	1.73	3.50	1.59	1.65	.104
Job Satisfaction	38.16	6.95	39.34	6.80	-3.43	.001

Note. PWB: Personal wellbeing index, WF: work interference with family, FW: family interferencewith work.

819

820 **Table 3.**

821 Comparison of study sample with national statistics on work-family conflict.

	Sample in this study		Population*		Z	р	Cohen's d
	Mean	SD	Mean	SD	_		
WF _{LD}	4.61	2.04	2.50	0.86	22.22	.0001	2.45
WF _{RO}	4.54	1.89	2.50	0.86	21.48	.0001	2.37
$\mathrm{FW}_{\mathrm{LD}}$	3.72	1.73	2.14	0.78	18.34	.0001	2.03
FW _{RO}	3.50	1.59	2.14	0.78	15.78	.0001	1.74

- 822 Note. LD: Lockdown Phase, RO: After Reopening, WF: work interference with family, FW: family
- 823 interference with work. *Population statics obtained from Breyer and Bluemke (2016).
- 824

825 **Conflict of Interest**

826 The authors declare that the research was conducted in the absence of any commercial or financial
827 relationships that could be construed as a potential conflict of interest.

828 Author Contributions

- 829 RLD, IL, SG: Research Design, Data Collection, Writing and Review.
- 830 RLD, SP: Data Analysis, Review
- 831

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834 Data Availability Statement

- 835 Quantitative data pertaining to this study can be accessed from
- 836 https://data.mendeley.com/preview/92g4pthx4p. However, qualitative data could not be made public
- to protect the identity and other sensitive information pertinent to the study participants.