Personal Experience and Public Support for Internet Shutdowns in Rural India

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Abstract

India, despite being the world's largest democracy, leads the globe in the number of government-imposed internet shutdowns. While internet access is crucial for daily life, there is paradoxically growing public support for these shutdowns. This raises important questions about how individuals form their opinions on internet shutdowns and whether personal experience can alter these beliefs. In this paper, we develop and test an experiential intervention to examine whether personally experiencing an internet shutdown changes individuals' attitudes toward such policies. We recruited 246 participants from rural India and asked them to voluntarily disconnect from the internet for 48 hours. Our results reveal that contrary to expectations, participants did not show a significant shift in their beliefs. In fact, a slight increase in support for internet shutdowns was observed after the intervention. Qualitative feedback suggests that participants often substituted internet use with offline activities, such as spending time with family or focusing on personal development, which may have contributed to this unexpected outcome.

This study highlights the difficulty of changing deeply held beliefs, even when individuals experience firsthand the inconvenience of an internet shutdown. Our findings emphasize the complexity of public opinion on digital rights and governance, suggesting that experiential interventions alone may not be sufficient to shift perspectives. The study contributes to the broader discourse on internet governance and the challenges of addressing public support for internet restrictions.

1 Introduction

India, the world's largest democracy, paradoxically holds the record for the highest number of government-imposed internet shutdowns globally (Access Now 2024). Despite the internet's integral role in modern society—facilitating communication, access to information, economic activities, and the functioning of democratic processes—there is increasing public support in India for these shutdowns (CSDS 2022). This raises critical questions about the public's perception of internet freedoms and the impact of such shutdowns on civil liberties.

In this paper, we develop and test an intervention aimed at changing beliefs about internet shutdowns. Our intervention is designed to address the following research question: *Does*

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personally experiencing an internet shutdown alter individuals' perceptions of these government-imposed restrictions?

Access to the internet is increasingly recognized as a basic human right worldwide. In an era where digital connectivity is essential for daily life, education, commerce, and governance, internet shutdowns not only restrict freedom of expression and access to information but also cause significant economic disruptions and hinder social progress. These shutdowns are often justified by governments on grounds ranging from curbing dissent to maintaining public order. However, they can undermine democratic principles and have profound effects on individuals' livelihoods and well-being.

Addressing this problem is challenging for several reasons. Changing deeply held beliefs is inherently difficult, especially when they are intertwined with political affiliations, cultural norms, or perceived notions of security and order. Naïve approaches, such as simply presenting information about the negative impacts of shutdowns, may fail to persuade individuals who have not personally felt the effects. Moreover, governments do not impose internet shutdowns randomly; they are often enacted in specific regions during times of unrest, meaning that not all citizens experience them directly. Those unaffected may be more inclined to support shutdowns, perceiving them as necessary for national security, while those who endure them firsthand may recognize the substantial personal and economic costs.

To the best of our knowledge, prior research has not empirically examined whether personal experience with internet shutdowns influences public opinion on the matter. Previous studies have focused on documenting the frequency of shutdowns, their economic impacts, and legal implications (Human Rights Watch 2023), but there is a gap in understanding the social and psychological effects on individuals' perceptions and attitudes.

In this study, we recruited 246 participants from rural India to voluntarily give up their internet access for 48 hours. Our goal was to simulate the experience of an internet shutdown and assess whether this personal deprivation would lead to a change in their support for such government policies. Contrary to our expectations, the results showed no significant shift in beliefs post-experience. In fact, we observed a slight increase in support for internet shutdowns after the intervention. Qualitative analysis of par-

ticipants' voice-recorded accounts suggested that during the shutdown, individuals substituted internet use with offline activities, such as spending time with family, engaging in community events, or focusing on personal development, which may have contributed to the increased support.

Our study contributes to the ongoing dialogue on internet governance and digital freedoms by highlighting the resilience of public attitudes and the complexity of influencing them, even through direct personal impact. The findings suggest that experiential interventions alone may not be sufficient to change beliefs about internet shutdowns. Factors such as cultural context, trust in government, and perceived benefits of disconnection play significant roles in shaping opinions.

While our approach may be limited by its focus on rural India, the considerable challenges in recruiting participants willing to voluntarily give up internet access illustrates the importance of this question, especially given the prevalence of and support for internet bans. Addressing these limitations present promising avenues for future research.

2 Background and Related work

India, the world's largest democracy, has experienced a dramatic increase in internet usage over the past decade. The advent of affordable mobile internet services, propelled by the widespread adoption of 3G and 4G technologies, has significantly expanded internet penetration across the country, including rural areas. India offers some of the cheapest mobile data rates globally, which has facilitated access for millions of users (Roy 2019). The internet has become an indispensable tool for livelihoods, education, communication, and the overall functioning of democracy in India.

Despite the essential role of the internet in daily life, India paradoxically leads the world in government-imposed internet shutdowns. For six consecutive years, India has topped global charts in the number of internet shutdowns (Access Now 2024), surpassing even authoritarian regimes. In 2023 alone, the country recorded 116 instances of internet shutdowns, accounting for 41% of the 283 shutdowns documented worldwide. The duration of these shutdowns has been increasing, with 41% lasting five or more days in 2023, up from 15% in 2022. The longest shutdown occurred in Manipur, lasting 212 days—from May 3 to December 3—with only a brief three-day respite. Kashmir, the contested region in the northern part of India has also had months of internet shut downs (of America 2023).

The reasons cited by the Indian government for these shutdowns are varied and, at times, controversial. They include preventing or responding to protests, cheating in exams, communal violence, and other law and order concerns (Human Rights Watch 2023). Notably, internet shutdowns have been imposed to prevent cheating during examinations, affecting the entire population despite only a small subset being involved in these exams. Such broad applications raise questions about the proportionality and necessity of these measures.

The economic and social consequences of these shutdowns are significant. Economically, internet shutdowns

cost India \$1.9 billion and \$118 million in foreign investment in the first half of 2023 alone (Access Now 2024). Socially, shutdowns disproportionately affect vulnerable communities who rely on digital services for social protection measures, access to food, and livelihoods. For many, especially the poorest, not having internet access means losing livelihood opportunities in today's digital age (Watch 2023).

Internet access in India is not merely a convenience but a necessity. It enables digital payments, access to government services, communication, and educational opportunities. Even in rural areas, people depend heavily on internet connectivity for their daily activities. The pervasive integration of the internet into all facets of life means that shutdowns can have cascading effects on individuals and the economy at large (Gnanasambandam et al. 2012; National Informatics Centre 2023).

Despite these adverse impacts, there is widespread public support for internet shutdowns in India. A survey conducted by Lokniti Centre for the Study of Developing Societies found that 56% of the population supports internet shutdowns (CSDS 2022). This support is often rooted in concerns over national security, the prevention of misinformation, and the maintenance of public order. The paradox of high internet dependence coupled with significant support for shutdowns underscores the complexity of public opinion on this issue.

The use of internet shutdowns as a tool for law enforcement has been criticized for being disproportionate and for violating human rights norms (Internet Society 2023; Bhattacharya 2024). Critics argue that such measures impede the exercise of fundamental rights, such as freedom of expression and access to information, which are essential components of a functioning democracy. The frequent and, at times, arbitrary nature of these shutdowns raises critical questions about the balance between security measures and the protection of civil liberties.

Research on internet shutdowns in authoritarian contexts offer valuable comparative insights for understanding similar phenomena in India. Grinko et al. (2022) analyze the Iranian government's response to the 2019 protests, showing how authorities went beyond a simple internet shutdown by "nationalizing" the internet, severing access to the global network while maintaining a domestic intranet. Their study, based on interviews with Iranians, highlights both the profound disruptions to daily life and the creative technical and non-technical strategies citizens used to circumvent restrictions, introducing the concept of "counterappropriation" to describe these grassroots responses. Similarly, (Guntrum 2024) explores the use of ICTs by activists during Myanmar's 2021 military coup, documenting how internet shutdowns and social media blockades forced activists to adapt their tactics. Through qualitative interviews and surveys, Guntrum finds that activists increasingly relied on secure messaging apps, offline tools, and innovative digital workarounds to organize, mobilize, and disseminate information despite state repression. The study shows the importance of both technical and social adaptation in the face of connectivity blackouts and highlights the need for technologies that are resilient to shutdowns and surveillance.

In this paper, we aim to explore whether personal experience with internet shutdowns can influence individuals' perceptions and support for such measures. By simulating an internet shutdown, we investigate if firsthand experience of the associated inconveniences and disruptions leads to a greater understanding of the negative impacts on daily life and livelihoods. Our study seeks to determine whether experiential interventions can shift public opinion and foster a more critical evaluation of the use of internet shutdowns in India.

Our primary interest lies in understanding why citizens offer conditional or unconditional support for undemocratic acts, such as internet shutdowns. A growing body of literature in social science explores the reasons behind, ramifications of, and acceptance of undemocratic behavior (Grillo et al. 2023). Scholars have examined how environmental cues influence individual decisions and behavior. Studies in environmental policy, taxation, and public-service rationing consistently show that when individuals personally incur costs — lost electricity hours (Burlig and Preonas 2024), mandatory water cuts (Muller 2019), or higher tolls (Helmers, Frondel, and Sommer 2023) — their support for that policy declines. Further, a growing literature has explored the links between personal experience, and its impact on personal opinion and behavior in varied contexts like climate change, political attitudes, well-being etc. (Howe 2021; Sands and de Kadt 2019; Womick et al. 2021). Hence, we reasoned that an unannounced, simulated loss of connectivity would similarly make the private costs of shutdowns salient and thus lower approval. Drawing on Olson's collective-action logic (Olson Jr 1971) and more recent work on public-health mandates (Gollwitzer et al. 2021) we posit that attitudes hinge on how people trading off immediate personal inconvenience against a vaguely defined collective benefit ("national security"). Our design aims to isolate this tension by imposing tangible costs while holding the purported collective benefit constant.

Concurrently, substantial research in information economics and technology examines the impact of internet addiction and its broader implications, often through studies that recruit users to voluntarily relinquish access to social media (Allcott et al. 2020; Collis and Eggers 2022).

We combine these two approaches by recruiting users to voluntarily experience a simulation of internet shutdowns in a setting characterized by a relatively high degree of support for such bans. Our focus on rural India is significant for several reasons. First, India is home to the second-largest population of internet users in the world, following China, with a majority residing in rural areas. Second, a report from Human Rights Watch highlights that access to the internet profoundly influences opportunities for employment, education, and even access to public services (Watch 2023). This context makes it crucial to understand the implications and public opinion about internet shutdowns in a country that is increasingly reliant on digital connectivity

3 Design

Study Design. We employed a within-subjects experimental design to investigate whether personally experiencing

an internet shutdown influences individuals' support for government-imposed internet shutdowns. Our central hypothesis was that participants who personally undergo such bans adopt a more critical stance toward these policies, potentially resulting in reduced support for internet shutdowns as a governance tool.

To simulate the experience, we asked our recruited participants to voluntarily forego internet access on their smartphones for 48 hours. In recognition of their effort, we compensated participants with INR 1,000 (approximately USD 12). This amount was determined based on local wage standards and typical recruitment practices in India, ensuring it was sufficient to incentivize participation without exerting undue influence. The intervention aimed to closely replicate the conditions of an actual internet shutdown, enabling us to observe any shifts in attitudes resulting from this firsthand experience.

Participant Recruitment. Participants were recruited from villages in Uttar Pradesh, India using a convenience sampling approach facilitated by a local survey firm that employed a snowball sampling method. Uttar Pradesh is home to about 250 million people (roughly 15-16% of India's population) with over half the population reportedly residing in rural areas. The firm initially contacted individuals within various villages, who subsequently recruited participants through their networks. To address the challenges of approaching individuals personally in rural settings, we organized small gatherings in randomly selected locations. During these meetings, we provided a detailed explanation of the study and invited individuals to participate.

The study was conducted during the first and second weeks of August 2024 in various villages across Uttar Pradesh. This region was selected based on logistical considerations and the survey firm's existing network of contacts, which facilitated participant recruitment and data collection. Despite offering a competitive compensation which is almost two times the local daily wages, recruitment proved challenging. Internet access is integral to daily life in India, even in rural areas, particularly for essential economic activities such as digital payments. Several individuals were reluctant to disconnect from the internet due to personal and professional dependencies. Many participants either declined to participate or were unable to relinquish internet for the entirety of the 48-hour period, often citing the inconvenience posed by the lack of connectivity. Due to ethical concerns, we did not catalog information about participants who refused to participate in our study. Roughly one in 10 participants we approached agreed to participate. As a result, our final sample consisted of 246 participants, approximately half the number we initially sought, who were less active internet users or who did not heavily rely on digital payments and services. This self-selection presents a limitation to our study and raises concerns about the generalizability of our findings. The survey firm indicated that achieving a larger sample size would have required substantially higher compensation, potentially up to ten times the amount offered. However, such elevated compensation levels could have introduced biases, including experimenter demand effects

Sampling Strategy and Rural Focus. In addition to the logistical considerions, the choice of rural regions in Uttar Pradesh was motivated by substantive considerations. Rural India embodies a paradox central to the internet-shutdown debate. Although almost two-thirds of Indians live in rural areas, broadband penetration remains patchy and mobile data is often the major gateway to critical services such as government cash transfers, subsidised fertiliser portals and national-identification-linked welfare schemes (Access Now 2024). Further, these communities - largely overlooked in prior research - constitute a sizeable portion of the "next billion" users expected to come online in the coming decade, making them both novel and essential for theorybuilding (Roy 2019). Connectivity disruptions disproportionately threaten their livelihoods, yet prior survey evidence shows that support for shutdowns is remarkably high in precisely these settings (CSDS 2022). These attritbutes, therefore, allows us to observe the tension between acute dependence on digital infrastructure and the willingness to endorse state-imposed blackouts. Logistically, the survey firm's village networks made recruitment feasible, while the region's political alignment with the ruling BJP provided a natural context for examining how partisan trust potentially shapes attitudes toward shutdowns. Focusing on this population thus offers valuable leverage—by foregrounding citizens who are simultaneously vulnerable to and accepting of bans- and presents practical advantages for field implementation.

Intervention Procedure. Upon agreeing to participate, each individual underwent a baseline assessment. Surveyors met with participants in person, explained the study protocol, and obtained informed consent. To ensure compliance, we confirmed that participants did not have wireless or wired internet access at home (self-reported), did not require internet access for work during the next two days (for ethical reasons), and did not possess additional internet-enabled devices in their households.

Participants completed a baseline survey that collected demographic information, including age, gender, religion, caste, profession, income, and education level. We also gathered data on political party support, social media platforms used, and current attitudes toward government-imposed internet shutdowns. The full list of survey variables is provided in the Appendix (Section 7.6).

To enforce internet deactivation, we utilized native functionality on participants' Android smartphones. Android devices provide settings to monitor and limit data usage. Surveyors assisted participants in setting a data usage limit of 10 MB, effectively disabling internet access after minimal use. This method was chosen for its accessibility and simplicity, although it lacks features for easy data export. We relied on participants to provide screenshots of their data usage statistics before and after the intervention. These screenshots served as verification that the internet was deactivated for the study duration. Participants were instructed to return exactly 48 hours later, with a tolerance of two hours. Participants received the first installment of their compensation, totaling 40% of the total payment at this initial meeting.

Surveyors disabled the internet on participants' devices

with detailed instructions to refrain from turning it back on unless faced with an emergency during the subsequent 48 hours. To document compliance, participants were required to take screenshots of their data usage before and after the intervention. This process, however, necessitated manual effort from both participants and surveyors. Survey protocols were rigorously adhered to by providing comprehensive training to the surveyors. This training emphasized ethical guidelines and the importance of following the study protocol to ensure the validity of the research. Surveyors were instructed on the necessity of avoiding coercion or bias, and they were trained to conduct the study ethically and respectfully.¹

Follow-up and Data Collection. At the end of the 48-hour period, participants reconvened with surveyors to complete the endline survey. This survey included the same questions on support for internet shutdowns as the baseline survey, allowing for within-subject comparisons of any changes in attitudes. Surveyors also verified compliance by comparing current data usage statistics with the baseline screenshots. Participants who had used more than 10 MB of data during the intervention were considered non-compliant and were excluded from the final analysis.

Finally, participants were asked to record an audio message detailing their experiences during the internet shutdown and to explain whether and how their opinions on internet shutdowns had changed. This qualitative data collection aimed to enhance the understanding of the quantitative findings by providing valuable insights into personal reflections and contextualizing participants' attitudes toward internet shutdowns. After verifying compliance and completing the endline survey, participants received the remaining 60% of their compensation. Surveyors then assisted in reactivating internet access on their smartphones by adjusting the data usage settings.

Data Verification and Compliance. To ensure data integrity, we implemented several verification procedures. Timestamps on the data usage screenshots were randomly examined to confirm they corresponded to the expected timeframes. We also cross-referenced reported data usage with device settings to detect any discrepancies. Compliance was exceptionally high, with only three participants failing to adhere to the protocol due to emergencies that necessitated internet use. These individuals were excluded from the analysis. Additionally, we obtained screenshots showing activity metrics (e.g., number of notifications and the frequency of phone unlocks) as proxies for phone usage and compliance. There was a significant drop in both the number of notifications and the frequency of phone unlocks (see Figure 15 in the Appendix), which indicated compliance and highlighted the importance of internet access in daily life before relinquishing internet during the study period.

¹The study protocol was reviewed and approved by our Institutional Review Board (IRB).

4 Results

4.1 Exploratory data analysis

The sample we obtained was heavily self selected and was biased demographically. 93% of the respondents were male (Figure 6), almost all of them (99%) were Hindu (Figure 7), a majority of them supported the current ruling party, the BJP (Figure 10). We obtained a good spread in terms of age (Figure 6), and caste (Figure 7). The distributions for various other demographic variables (Figures 6—10) as well as social media platform usage (Figure 12) and overall data usage stats (Figure 13) are shown in the Appendix.

4.2 Baseline Support for internet shutdowns

Our baseline survey findings revealed that support for government-imposed internet shutdowns was exceedingly high among participants, with over 80% expressing approval (see Figure 1). This finding aligns with previous surveys indicating substantial public endorsement (over 55%) of such measures (CSDS 2022). The elevated levels of support in our sample may be attributed to its skew towards supporters of the right-wing ruling party, as detailed in Section 3. This sample composition potentially amplifies pro-government sentiments, which may affect the generalizability of our findings.

Impact of the Simulated internet shutdown on Beliefs. The primary objective of our intervention was to evaluate the efficacy of a simulated internet shutdown in altering participants' beliefs about government-led internet shutdowns. We hypothesized that personally experiencing the inconvenience of an internet shutdown would decrease support and/or increase opposition to such measures.

Contrary to our expectations, the intervention resulted in an increase in support and a decrease in opposition to internet shutdowns. As illustrated in Figure 1, there was a 3.6% *increase* in participants expressing support and a 2.4% decrease in those opposing government-imposed internet shutdowns.² This outcome suggests that the intervention not only failed to reduce support but may have inadvertently reinforced participants' approval of internet shutdowns.

To delve further, we examined the transitions in participants' beliefs from baseline to endline. Figure 2 presents a transition matrix where each row corresponds to the baseline support level and each column represents the endline support level.

An overwhelming 95% of participants who supported internet shutdowns at baseline continued to support them even after the intervention. Among participants who were neutral at baseline, 50% shifted to supporting internet shutdowns at endline. Finally, 46% of those who initially opposed internet shutdowns changed their stance to support in the endline. These transitions indicate a general trend toward increased support for internet shutdowns, even among those who were

previously neutral or opposed. The intervention, rather than diminishing approval, appears to have reinforced or elevated support across different participant groups.

We hypothesize the reasons for these results in Section 5.

4.3 Demographics and internet shutdowns

To understand whether the change in beliefs about government-imposed internet shutdowns vary across different segments of the population, we analyzed the data based on various demographic factors and personal experiences.

Demographic Groups and Expectations We considered the following demographic variables collected during our baseline survey:

Political Affiliation: We classified participants based on their support for the incumbent party, the Bharatiya Janata Party (BJP). Given that the BJP is the incumbent political party at both the federal level and in the state where our study was conducted, supporters of the BJP (65% of our sample, as shown in Figure 10) might have stronger alignment with government policies. We anticipated that BJP supporters would maintain or even increase their support for internet shutdowns, viewing them as necessary measures implemented by their preferred government.

Age: Participants were divided into two age groups: *Young* (under 35 years, comprising 66% of our sample) and *Old* (35 years and above, making up 34%). Younger individuals are generally more reliant on the internet for communication, information, and entertainment (Varshney et al. 2014), leading us to expect that they would be more affected by the internet shutdown and thus more likely to oppose it after the intervention.

Education: We divided participants into those who completed beyond secondary school (47% of our sample) and others.

Income: We divided participants based on their annual income into two groups: those earning over 100,000 INR (approximately 1,250 USD, representing 49% of our sample) and those earning less.

Caste: Caste is a salient cleavage in Indian society, that is strongly correlated with socio-economic status. Therefore, participants were categorized into *Upper Caste* (54% of the sample) and *Other Castes* (46%).³

Profession: Participants were categorized based on their occupation into *Farming* (63% of the sample) and *Other Professions*.

For Education, Income, Caste and Profession, we anticipated that individuals in these higher education, with more income, from higher castes and in non farming professions rely more on internet (CSDS 2022), and hence would exhibit a greater decrease in support for internet shutdowns after experiencing the intervention.

Polarization and Personal Experience In addition to demographic variables, we included the following variables:

Political Polarization: We measured participants' expressed feelings towards supporters of other political par-

²In all figures, 'Strongly support' and 'Somewhat support' are combined into 'Support,' while 'Strongly oppose' and 'Somewhat oppose' are combined into 'Oppose.' The overall trends remain consistent when analyzing these categories separately. Detailed plots with all five categories are provided in the Appendix in Section 7.5.

³"upper" castes refer to those who are at the top of traditional Hindu caste hierarchy.

ties using a 'feeling thermometer' scale from (Allcott et al. 2020), ranging from 0 to 100. Ratings between 50 and 100 indicate favorable feelings, while ratings between 0 and 50 indicate unfavorable feelings. We expected that individuals with lower polarization (i.e., more favorable views towards opposing parties) might be more open to changing their beliefs about internet shutdowns after the intervention.

Self-Reported Experience: Participants provided qualitative feedback on their experience during the internet shutdown (as detailed in Section 4.5). We categorized these experiences into *Good* and *Bad*. We anticipated that participants who reported negative experiences would be more likely to decrease their support for internet shutdowns.

Results and Observations Table 1 summarizes the changes in support for internet shutdowns across the different demographic groups and experiences. All attitudinal variables are measured twice for the same participants, so every comparison is inherently paired. We therefore tested net change with the McNemar χ^2 test (McNemar 1947) for matched proportions, applying the continuity correction recommended for small discordant counts. To complement the hypothesis test we present the percentage point change and its 95% confidence interval. Intervals are calculated with Newcombe's hybrid Wilson method, which combines Wilson score limits for the two discordant proportions and provides accurate coverage even when the discordant cells are small (Wilson 1927; Newcombe 1998). A change is deemed statistically significant when the confidence interval excludes zero and the associated McNemar p-value is below .05. Table 3 (Appendix) shows the detailed results with the significance values. The overall trend mirrors our main findings: most sub-populations exhibited a slight increase in support for internet shutdowns after the intervention. Contrary to our expectations, both younger and older participants showed an increase in support for internet shutdowns. Notably, the change was slightly higher among the younger group, suggesting that even those who might be more dependent on the internet did not decrease their support after experiencing the ban.

That said, we observed a significant divergence between BJP supporters and non-supporters (Row 1 in Table 1). BJP supporters exhibited a substantial increase in support for internet shutdowns, reflecting their alignment with government policies. In contrast, participants who did not support the BJP showed minimal change or even a slight decrease in support, indicating a strong correlation between political affiliation and perceptions of government policies. This was further evidenced by our polarization metrics (Row 7 in Table 1), where participants with lower levels of polarization (more favorable views towards other political parties) displayed a decrease in support for internet shutdowns.

Surprisingly, participants who reported negative experiences during the internet shutdown still exhibited an increase in support for such bans (Row 8 in Table 1). This counterintuitive result suggests that personal inconvenience did not necessarily translate into decreased support, possibly due to overriding factors such as political party preferences or beliefs about the "greater good". Finally, while participants oc-

Table 1: Summary of results by demographics. Each value in the table indicates the percentage difference between baseline and endline values (endline - baseline). For instance, for BJP supporters (Row 1) there was a 12.07 percentage points *increase* in support for internet bans and 10.34 percentage points *decrease* in opposition to internet bans in the endline compared to the baseline. The values in bold indicate the statistically significant results (see Table 3 for details).

Row#		Support	Oppose	Support	Oppose		
ROWπ		Support	Oppose	Support	Oppose		
1	Party	BJP		Other			
1	Party	12.07	-10.34	1.06	0.00		
2	А пе	18-34 years		>35 years			
	Age	4.96	-2.13	1.05	-2.11		
3	Education	Over Secondary school		Below Secondary school			
	Education	4.88	-2.47	2.45	-2.44		
4	Income	>100,000 INR		<100,000 INR			
		2.63	-3.95	4.12	-1.76		
5	Caste	Upper Caste		C	Other		
3		1.97	-0.66	6.38	-5.32		
- 6	Profession	Farming		Other			
		-1.47	0.74	10.00	-6.36		
7	Polarization	High		Low			
		1.72	-2.21	-1.55	1.97		
8	Experience	Good		Bad			
		6.25	-2.08	4.55	-3.03		

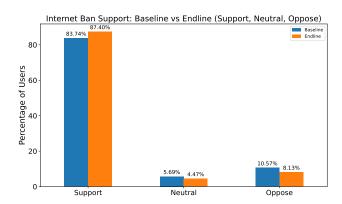


Figure 1: Baseline and Endline Support

cupied in farming showed a slight decrease in support for internet shutdowns where as other professions did not, contradicting our expectations (Row 6 in Table 1). This may indicate that occupational dependence on the internet did not significantly affect attitudes towards internet shutdowns. Additionally, we did not observe any significant differences in trends for Caste, Income and Education. Appendix table 5 provides regression evidence showing a significant correlation between baseline support for internet bans and its persistence even after our experimental intervention. Due to limitations in our participant recruitment and the lack of randomization of participants into treatment and control groups, our analysis has focused only on the descriptive aspects of our intervention.

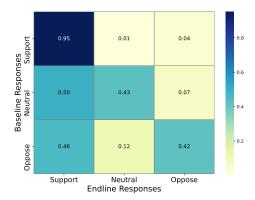


Figure 2: Heatmap showing the changes in baseline support.

4.4 Support for internet shutdown for other reasons

In addition to assessing overall support for government-imposed internet shutdowns, we explored participants' attitudes toward internet shutdowns implemented for specific purposes. We asked whether they supported internet shutdowns to: (i) prevent protests, (ii) prevent terrorism, (iii) prevent cheating in exams, (iv) prevent communal riots, and (v) during elections. Table 2 shows the results (Table 4 shows the significance tests). The results reveal several interesting patterns:

First, there was a substantial increase in support for internet shutdowns that were aimed at preventing communal riots (+4.31%) and a moderate increase for preventing terrorism (+0.82%). The heightened support for preventing communal riots may reflect the generally low levels out-group trust in rural India. However, we refrain from drawing stronger conclusions regarding this finding due to the idiosyncratic nature of our sample.

Next, we observed decreased levels of support for scenarios where the users might have been personally impacted by, either during our intervention or in their personal lives. Notably, support for internet shutdowns aimed at preventing cheating in exams decreased by 2.87%, while support for bans during elections declined by 4.55%. This decline was accompanied by significant increases in opposition (+4.51% and +5.79%, respectively). We posit that these scenarios likely have a direct personal impact on individuals, as they can interfere with daily activities, communication, and access to essential services during critical periods such as examinations and elections.⁵ Since approximately 40% of the sample reported spending time on work or study (as shown in Figure 3), an internet shutdown during exam periods could disrupt academic pursuits, access to educational resources, and timely communication with educators and peers.

Table 2: Difference in support for other purposes. The numbers indicate change in percentage of Support/Oppose from baseline to endline. For instance, people decreased their support for shutting down internet to prevent cheating in exams (Row 3) by 2.87%. Significance tests for the differences are shown in Table 4 (Appendix).

	Support	Oppose
Prevent protests	1.23	0.02
Prevent terrorism	0.82	0.41
Prevent cheating in exams	-2.87	4.51
Prevent communal riots	4.31	-0.72
Prevent cheating in elections	-4.55	5.79

4.5 Qualitative Findings

To gain deeper insights into participants' experiences during the simulated internet shutdown, we conducted qualitative interviews. Participants were asked to record audio accounts responding to the following questions: "Please share your experience living without the internet for the past two days. What did you do instead of using the internet? How did you feel?" The recordings were in Hindi, that we transcribed and analyzed using thematic coding to identify common themes and patterns in their responses.

We analyzed the audio recording transcripts using reflexive thematic analysis as articulated by Clarke and Braun (2017). Reflexive thematic analysis treats themes not as latent facts waiting to be discovered but as interpretive patterns that researchers actively construct in dialogue with the data. Adopting this perspective allowed us to foreground participants' meaning-making while remaining attentive to our own positionality as urban scholars studying rural communities. Following Braun and Clarke's six-phase procedure, we first familiarized ourselves with the Hindi-language transcripts, writing analytic memos as we read. The first author who is fluent in Hindi then carried out line-by-line open coding in NVivo 14, generating 126 initial codes. These were regrouped into 18 axial categories and finally distilled into five higher-order themes: economic dependence on the state, security-misinformation rationales, communitarian ethics, digital-literacy constraints and resilience/adaptation strategies. Because interpretation in reflexive thematic analysis hinges on deep immersion rather than coder consensus, we intentionally used a single coder whose linguistic fluency minimized translation loss and ensured semantic nuance.

Activities during the internet shutdown The majority of participants reported engaging in routine offline activities during the internet shutdown. Many occupied themselves with work-related tasks such as farming, household chores, and professional responsibilities. Some participants used the opportunity to focus on studies or complete pending tasks. A summary of their reported activities is presented in Figure 3, and their overall experiences are summarized in Figure 32. As we can see from Figure 3, most participants focused on other activities such as work/study, offline entertainment like watching movies/reading or finishing up household chores. Some participants described their feelings without explicitly mentioning specific activities, resulting in some unknowns in the data.

⁴A common reason cited for internet shutdowns is to prevent cheating and ensure exam integrity (Times of India 2024).

⁵With over 80% of our sample reporting that they voted in the last election (see Figure 10), electoral participation is evidently important for our participants.

Positive Experiences and Increased Productivity: For many individuals, the absence of the internet had minimal impact on their daily lives and even led to positive outcomes. The lack of digital distractions allowed them to concentrate more on their work, personal responsibilities, and relationships, resulting in feelings of productivity and satisfaction. Several participants reported using the internet-free period to strengthen family bonds, engage in community activities, and focus on personal development. One participant mentioned, I used to spend time on the phone all day, but after switching off the internet, I spent time with my loved ones and family highlighting a newfound appreciation for offline interactions. Another reflected, I spared more time for my family and home. I concentrated on works which I used to ignore while using internet. I felt it good. A different participant stated, I utilized the spare time in my work and finished all my pending jobs. It was good without internet as I adjusted that time in my other jobs., indicating a positive shift in priorities and time management.

Negative Experiences and Feelings of Disconnection: Conversely, 27% of the participants experienced discomfort and a sense of disconnection without internet (see Figure 32). The inability to communicate with friends on social media or access online services—particularly for payments—led to feelings of isolation and inconvenience. Practical challenges were noted, such as difficulties with online financial transactions and missing out on real-time events like cricket matches. One participant expressed, Without internet, we are disconnected from the world. It was a difficult period without internet. Another shared, I did not feel good without internet as I was not connected to my friends on social media., expressing the importance of the internet in maintaining social and informational connections.

Impact on Perceptions of internet shutdowns Despite the varied experiences, the simulated internet shutdown did not significantly change participants' perceptions regarding government-imposed internet shutdowns. As discussed in Section 4.2, participants' beliefs remained largely unchanged. To explore this further, we asked: "Does living without the internet change your perceptions of governments banning the internet?" Analysis of the responses revealed two main themes:

Unchanged Beliefs Due to Minimal Impact: Some participants did not feel troubled by the lack of internet and therefore did not alter their beliefs about government bans. One participant stated, *If the government bans it, that must be for our benefit only. So that won't change my belief.* Interestingly, even participants who reported negative experiences did not necessarily change their stance. This suggests a level of acceptance or trust in governmental decisions.

Acceptance Despite Discomfort: Other participants acknowledged the difficulties of living without the internet but still supported government bans for various reasons, such as trust in governmental actions or nostalgia for simpler times. One participant remarked, *It did not affect my belief. The involvement of internet in our life is too excessive. It's now necessary to use internet only for essential things.* Another noted, *It was difficult, but if the government bans it, I can*

get used to it. After all, I lived without internet for a lot of years. These responses reflect a belief that while the internet is convenient, its absence is manageable and perhaps even beneficial.

Some participants supported partial or temporary bans during emergencies but opposed permanent restrictions. One individual explained, If the internet is banned for a short period during emergencies, it's okay. But it will definitely affect my belief if it is banned forever. It hampers our daily jobs. Another participant echoed this sentiment, I do not support a full internet shutdown, but if it is essential for the government for a short period of time, then it's okay.

Overall, the simulated internet shutdown elicited a spectrum of responses, reflecting the complex relationship individuals have with digital connectivity. While some participants appreciated the opportunity to focus on offline activities and strengthen personal relationships, others experienced significant inconvenience and isolation. Given that our sample was highly biased and heavily self-selected for low internet dependence (as indicated in Section 3), the fact that 27% felt inconvenienced shows the importance of the internet in daily life. Nonetheless, participants' perceptions of government-imposed internet shutdowns remained largely unchanged, highlighting a potential acceptance of such measures or a belief in their necessity under certain circumstances.

Socio-economic Drivers of Shutdown Support The qualitative interviews reveal that participants' endorsement of internet bans is rooted in three intertwined rural realities. First, economic dependence on the state: smallholder farmers and daily-wage earners described a reciprocal relationship in which government price supports, rations or free mobile data oblige citizens to "give the government the benefit of the doubt," as one respondent put it . Second, limited digital literacy and risk perception: many participants equated the internet with a handful of social-media apps, expressed difficulty distinguishing rumours from facts and framed temporary disconnection as a prudent "reset" to curb misinformation. Third, a communitarian ethic anchored in caste-panchayat and religious institutions valorizes sacrificing individual convenience for collective harmony; several interviewees explicitly rationalised the inconvenience as "for the greater good," even when it disrupted their daily lives, like online payments or access to work related information. Taken together, these insights show how rural socio-economic structures, rather than mere personal inconvenience, shape the apparent acceptance—indeed, endorsement—of government-imposed internet shutdowns.

4.6 Changes in happiness and life satisfaction

To assess the impact of the internet shutdown on participants' well-being, we measured changes in self-reported happiness and life satisfaction before and after the two-day period without internet access. This approach mirrors the methodology used by Allcott et al. (2020), who evaluated the welfare effects of social media deactivation. Participants responded to standardized questions using Likert scales: a four-point scale for happiness and a five-point scale for life satisfaction (see Appendix 7.6 for the full questionnaire).

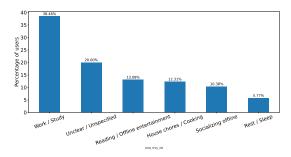


Figure 3: What the users did during the intervention period.

The measures presented indicate the percentage change in participants reporting each level of happiness and life satisfaction between the baseline (before the internet shutdown) and the endline (after the internet shutdown). Figure 4 illustrates these results.

Our findings reveal a noticeable decline in both happiness and life satisfaction following the internet shutdown. Specifically, there was a 3% decrease in participants reporting that they were happy and a 3.5% increase in those reporting unhappiness. Similar shifts were observed in life satisfaction ratings, with a decrease in those feeling satisfied and an increase in those feeling dissatisfied.

These effects contrast with the results of Allcott et al. (2020), who found that deactivating Facebook for four weeks led to improvements in well-being, including reduced anxiety and increased life satisfaction. In their study, participants could substitute Facebook with other internet activities, possibly mitigating negative effects. In our study, however, the complete shutdown of internet access eliminated such substitution possibilities, potentially amplifying the impact on well-being.

The significant decrease in happiness and life satisfaction after just a two-day internet shutdown is surprising and indicates the integral role of the internet in daily life. Unlike the partial social media deactivation studied by Allcott et al. (2020), our participants experienced a total disconnection from all online services, including communication platforms, entertainment, and essential utilities like online payments. These findings highlight the importance of the internet not only as a source of information and communication but also as a contributor to overall well-being. The negative effects observed, even over a short duration, suggest that internet shutdowns can have immediate and significant impacts on people's happiness and life satisfaction. This emphasizes the need to carefully consider the welfare implications of internet shutdowns and motivates further research into strategies to mitigate their adverse effects. By demonstrating that even a brief internet shutdown can decrease well-being, our study contributes to the broader understanding of the social and psychological importance of digital connectivity. It further calls attention to the potential costs associated with government-imposed internet restrictions and the necessity of balancing security concerns with the societal welfare.

Similarly, we examined changes in perceived polarization towards opposing viewpoints, utilizing the measures from

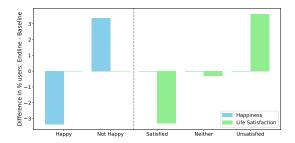


Figure 4: Change in Happiness and Life satisfaction

(Allcott et al. 2020). Our analysis did not reveal any significant difference between the baseline and endline polarization levels (tested using a Welch's t-test (Welch 1947), p=0.69), as depicted in Figure 33 in Appendix 7.5. Notably, the baseline polarization score was relatively low at 70, indicating that participants were not highly polarized to begin with.

5 Reasons for the Intervention's Failure

Despite our efforts to simulate an internet shutdown by asking participants to deactivate their internet access for two days, the intervention did not yield the expected decrease in support for government-imposed internet shutdowns. Instead, support remained the same or even increased among participants. Several factors may explain this counterintuitive outcome, which we discuss below.

Adaptation and Resilience. One possible reason for the intervention's failure is the participants' ability to quickly adapt to the short duration of the internet shutdown. Our original design intended for a week-long deactivation, but practical constraints made it unfeasible. Extending the duration would have posed significant challenges, including increased compensation demands from participants due to their dependence on internet connectivity, even in rural India. Additionally, ethical considerations regarding prolonged disconnection limited our ability to extend the intervention period.

As a result, the two-day duration may have been insufficient for participants to fully experience the negative consequences associated with extended internet shutdowns. In real-world scenarios, more than 40% of internet shutdowns last at least five days (Access Now 2024), and the typical internet shutdown in India lasts several days. The short intervention likely led participants to underestimate the impacts of longer-term bans, as they did not encounter the cumulative effects of prolonged disconnection. Participants easily found alternative ways to occupy their time, such as engaging in offline activities like work/study, household chores, or spending time with family. As one participant noted, engaging in these activities provided a sense of fulfillment, which could mitigate any negative feelings about the lack of internet access.

Moreover, knowing that the internet would be restored after two days may have lessened the perceived severity of the ban. This temporary adaptation could lead participants to underestimate the negative impacts of longer-term bans, as they did not experience significant disruptions or miss

critical information and opportunities. Interestingly, some participants discovered personal benefits during the internet shutdown, such as increased productivity, better focus, or enhanced interpersonal interactions, which may have inadvertently increased their support for internet shutdowns.

Study Context and Trust in Government. The intervention took place in a region where the state government is led by the same party as the federal government (BJP). This political alignment may have strengthened the association between government actions and party loyalty. Participants who support the ruling party might be more inclined to view internet shutdowns as justified and necessary, reinforcing their support even when experiencing inconvenience.

Participants may perceive government-imposed internet shutdowns as legitimate actions taken to ensure national security, curb misinformation, or maintain social order. This perceived legitimacy can result in continued or increased support for internet shutdowns, as participants believe that such measures are in the best interest of society as a whole. High levels of trust in government decisions can lead to acceptance of policies like internet shutdowns, even when they cause personal inconvenience. Questioning or opposing government actions might be culturally discouraged, contributing to increased support for government policies despite negative personal experiences.

Sample Bias and Selection Effects. Our sample's characteristics may have significantly influenced the results. As detailed in Section 3, the sample was skewed toward supporters of the ruling party, with 65% identifying as BJP supporters, mostly men and dominated by farmers. This political homogeneity could amplify the observed increase in support for internet shutdowns, as participants are predisposed to align with government actions. Additionally, the perception of the government being synonymous with the BJP may have reinforced this bias. Furthermore, the recruitment process may have led to a self-selection bias. Participants willing to deactivate their internet access for the study might already have lower internet dependence or usage. Qualitative interviews revealed that many participants were low internet users at baseline, often engaged in occupations like farming that do not require constant connectivity. As a result, the intervention's impact on their daily lives was minimal, and they were less likely to oppose internet shutdowns due to a lack of significant disruption.

The difficulty in recruiting participants who are highly dependent on the internet illustrates this bias. Many potential participants declined to participate or demanded significantly higher compensation, highlighting the challenges in obtaining a representative sample. Consequently, the findings may not generalize to populations with higher internet dependence, who might react differently to an actual internet shutdown.

6 Conclusion and Learnings

The unexpected outcome from our study provided several important insights into the complexities of public opinion on internet shutdowns and the factors influencing it.

The Essential Role of the Internet in Daily Life. First, our study highlights the indispensable role of the internet, even among a highly biased and self-selected sample from

rural India. We found high penetration and substantial internet usage, with users consuming tens of gigabytes of mobile data monthly in rural settings. The internet is intimately tied to daily livelihoods, education, communication, and access to information. Yet, the high degree of support for internet shutdowns suggests a complex relationship between personal needs and public opinion.

Limitations and Ethical Considerations of Experiential Interventions. Second, we learned that designing interventions that simulate internet shutdowns present significant practical and ethical challenges. Asking participants to disconnect from the internet for extended periods is not only impractical — given their reliance on connectivity — but also raises ethical concerns. Given the dependence of internet for basis necessities, and the high cost of recruited a representative sample highlights the challenges in credibly estimating the effects of internet shutdowns and public perceptions about the same. Prolonged disconnection could interfere with participants' livelihoods, access to essential services, and overall well-being. Our attempt to extend the deactivation period was unfeasible without offering substantially higher compensation, which could be construed as coercive and ethically problematic. Moreover, recruiting a more representative sample is hindered by self-selection bias, as individuals who are highly dependent on the internet are less likely to participate in such studies. The internet's status as a lifeline for many makes it difficult to ethically implement interventions that require disconnection.

Ineffectiveness of Experiential Interventions Alone. Third, the study highlighted the ineffectiveness of experiential interventions alone in changing deeply held beliefs. The overall increase in support for internet shutdowns across most demographics suggests that simply experiencing an internet shutdown is insufficient to alter opinions, even among those who faced inconvenience. This finding illustrates the complexity of measuring public opinion, which is often intertwined with political belief, cultural norms, and trust in authority. Some participants in our study hinted at rationalizing the inconvenience as a necessary sacrifice for greater societal benefits.

Perceived Legitimacy and Necessity of internet shutdowns. Fourth, we observed that participants evaluate internet shutdowns through the lens of perceived legitimacy and necessity. Support for internet shutdowns was higher when associated with preventing serious threats to public safety, such as terrorism and religious riots. Participants appear to prioritize collective well-being over personal inconvenience when they believe the measures serve a greater good. Conversely, decreased support for internet shutdowns during exams and elections highlights the impact of personal experience and direct effects on daily life. These events are personally significant and recurring; disruptions due to internet shutdowns are more keenly felt and may be viewed as disproportionate or unjustified. Participants may perceive such bans as interfering with essential personal and civic activities, leading to increased opposition. This contrast suggests that public support for internet shutdowns is nuanced and highly context-dependent.

Scope and Transferability. Finally, while our findings are

grounded in the political and socio-economic realities of rural Uttar Pradesh, we acknowledge that attitudes toward shutdowns could shift in regions with different histories of connectivity disruptions or partisan alignments, for example, in Jammu & Kashmir, where repeated blackouts may have already sensitized citizens to the costs, or in opposition-run states such as Tamil Nadu and West Bengal, where trust in the BJP-led centre is lower. At the same time, the core mechanisms we identify - individual experience of service loss, trade-offs between private inconvenience and perceived collective security, and the mediating role of partisan trust — are likely to operate across settings, even if their relative weight varies. We therefore interpret our study as context-specific yet conceptually transferable: future replications in diverse regions with credible experimental designs will help estimate how strongly these shared mechanisms manifest under different political, geographic, and shutdown-exposure conditions.

The unexpected results in our study emphasize the need to understand the nuanced perspectives of individuals toward internet shutdowns. In an increasingly connected world, balancing security concerns with the protection of civil liberties presents considerable challenges for policymakers and citizens alike. Understanding citizen views and potentially shifting them toward pro-democratic norms offers promising avenues for future research

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7 Appendix

7.1 Protocol

Baseline

1. Step 1: Limit Access to Data

We tell people to not use their internet and set the limit to something small, say 10 MB. This will turn off mobile data automatically (but it's easy to re-enable it if they are savvy).

- Go to **Settings**. Search for *Data warning*.
- Enable the "Set data limit" button.
- Select "Data limit". Enter 10 MB.
- See Figure 5 (a).

2. Step 2: Monitor Data Usage

We tell them that we can monitor their usage and show the data usage page and take a screenshot of it.

- Go to **Settings**. Search for "App data usage".
- Select "App data usage".
- · Take a screenshot.
- Scroll down and take screenshots covering all apps⁶.
- See Figure 5 (b).

3. Step 3: Enable App Usage Page and Take Screenshot

- Go to Settings. Search for "Digital Wellbeing".
- Select "Digital Wellbeing & Parental Controls" (might be called "Digital Wellness" on some phones).
- Select "Dashboard". Open settings and provide Usage access to "Digital Wellbeing".
- Take a screenshot of the page.
- See Figure 5 (c).

Endline

- 1. We take a screenshot again of their data usage page (see **Step 2** above) and if they didn't use any new data, we provide them with the incentive.
- 2. We take a screenshot of the app usage page to check usage (see **Step 3** above).
- 3. Photo of **Settings** \rightarrow **About Phone**.

7.2 Demographics plots

We show plots indicating the age, gender (Figure 6), religion, caste (Figure 7), profession, income (Figure 8), household size, amount spent on data (Figure 9), whether they voted, and party voted (Figure 10).

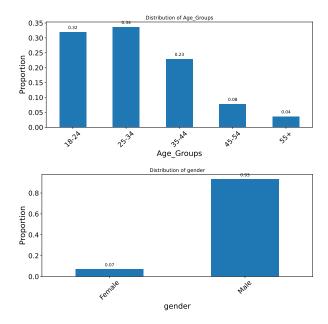


Figure 6: Age Groups and Gender Distribution

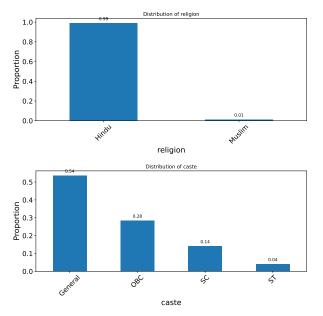


Figure 7: Religion and Caste Distribution

⁶Cover all apps in multiple screenshots if necessary.



Figure 5: (a) Screenshots to be taken - example Figure 1, (b) Screenshots to be taken - example - Figure 2, (c) Screenshots to be taken - example - Figure 3

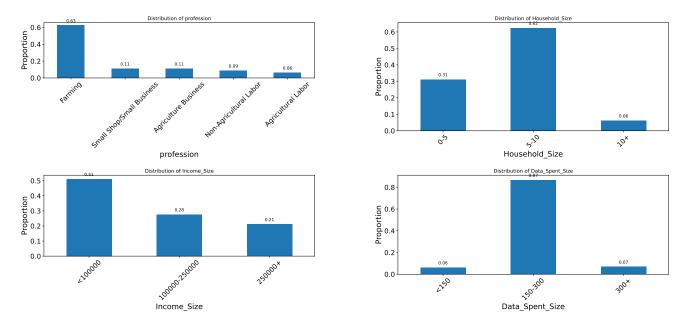


Figure 8: Profession and Income Size Distribution

Figure 9: Household Size and Data Spent Size Distribution

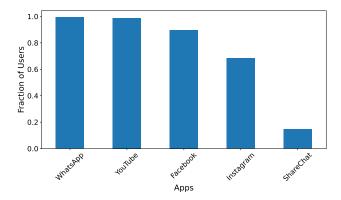


Figure 11: Platforms used.

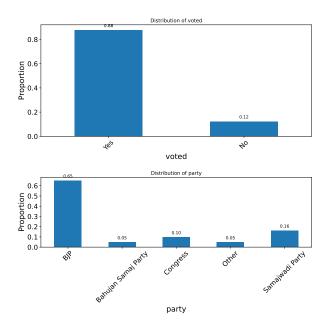


Figure 10: Party and Voted Distribution

7.3 Social media platforms and Data usage

Figure 11 shows the proportion of users who use popular social media platforms. Nearly all the participants reported using WhatsApp, YouTube and Facebook. Whereas, ShareChat, the Indian social network, was utilized by approximately 20% of our sample. Figure 12 reports the time spent on each of these platforms and some interesting patterns emerge. A significant portion of our participants dedicated several hours to Facebook and YouTube, in contrast to the relatively limited time spent on the popular messaging application WhatsApp. This trend is also reflected in the data consumption metrics. Figure 14 shows the top 10 apps using most data and Facebook/YouTube.

Figure 13 shows the total data used by the participants in one month. On average, the users use 14.5 GB per month (median 9.3 GB).

The top apps used by users are shown in Figure 14. Social media apps like YouTube, Facebook, Instagram, Tele-

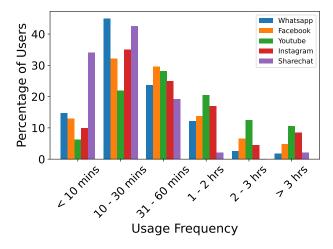


Figure 12: Time spent on various platforms.

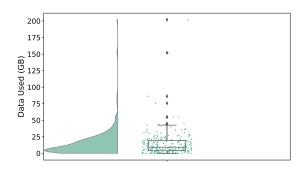


Figure 13: Total data used

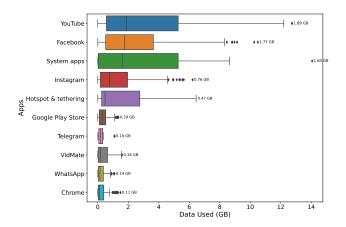


Figure 14: Top 10 apps and data used

gram and WhatsApp are among the top 10. Surprisingly, the amount of data used by YouTube, Facebook and Instagram is significantly higher than what WhatsApp uses (p < 0.001, significance tested using the Welch's t-test. We performed paired tests for Facebook/WhatsApp, YouTube/WhatsApp and Instagram/WhatsApp and found significant differences in all the cases.)

7.4 Compliance

Figure 15 shows the compliance. We see that users significantly reduce the number of notifications received. Significance tested using the Welch's t-test, p < 0.001. The baseline unlocks had a mean = 24.27, SD = 28.05 and an endline unlocks mean = 16.60, SD = 16.12; mean difference = -7.67, 95 % CI for difference in means [3.48, 11.83], t-statistic: 3.61, p = 0.0003, degrees of freedom = 366.96. For notifications, the baseline mean = 107.06, SD = 227.34 and an endline notifications mean = 32.45, SD = 51.26; mean difference = -72.61, 95 % CI for difference in means [44.35, 104.84], t-statistic: 4.85, p = 2.085e-6, degrees of freedom = 252.7. We also got the screenshots of their data usage pre and post. We computed the difference between the data usage pre and post and if the usage was more than 10MB, we discarded the participant. There were only 3 users who did not comply.

7.5 Internet ban support plots

Significance tests. Table 3 shows the McNemar significance tests for paired percentage-point changes.

Support for internet ban. Figure 16 shows the difference in baseline and endline support for internet shutdowns. The transitions are shown in Figure 28. We combined Strongly support and somewhat support into support and similarly for oppose.

The various figures are shown in Appendix (Figures 1, 27, 28).

Next, we looked at how the changes look per category of users. We specifically looked at two categories. First, users who feel good and bad about the internet ban.

Figure 17 shows the differences by experience.

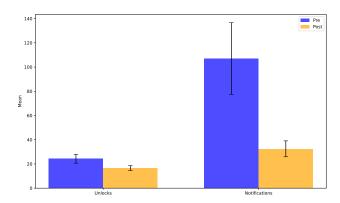


Figure 15: Unlocks and Notifications. We see a clear statistically significant drop in notifications indicating compliance.

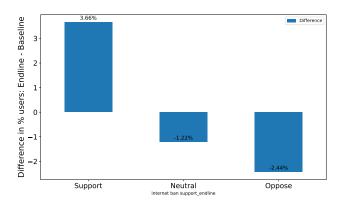


Figure 16: Baseline and endline support

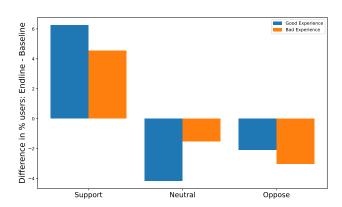


Figure 17: Change in support by their reported experience

Table 3: Paired percentage-point changes with McNemar tests for various demographic variables. 'All' refers to all the data without any subgroups.

Variable	Outcome	Subgroup Level	N	Change pp	95% CI	χ^2	p	Sig(<.05)
All	Support	All	246	3.66	[-2.32, 9.52]	2.21	0.137	False
All	Oppose	All	246	-2.44	[-7.88, 3.08]	1.04	0.307	False
Party	Support	BJP	188	12.07	[-3.34, 25.98]	3.27	0.070	False
Party	Oppose	BJP	188	-10.34	[-20.79, 1.38]	4.17	0.041	True
Party	Support	Other	58	1.06	[-5.26, 7.34]	0.06	0.814	False
Party	Oppose	Other	58	0.00	[-6.31, 6.31]	0.06	0.814	False
Age	Support	18-34	141	4.96	[-3.10, 12.76]	2.12	0.146	False
Age	Oppose	18-34	141	-2.13	[-9.27, 5.13]	0.31	0.579	False
Age	Support	35+	95	1.05	[-8.81, 10.83]	0.00	1.000	False
Age	Oppose	35+	95	-2.11	[-11.45, 7.40]	0.10	0.752	False
Education	Support	High education	123	4.88	[-4.10, 13.56]	1.56	0.211	False
Education	Oppose	High education	123	-2.47	[-10.58, 5.81]	0.31	0.579	False
Education	Support	Low education	123	2.45	[-5.83, 10.56]	0.31	0.579	False
Education	Oppose	Low education	123	-2.44	[-10.01, 5.28]	0.36	0.546	False
Income	Support	<100k INR	76	2.63	[-8.13, 13.14]	0.12	0.724	False
Income	Oppose	<100k INR	76	-3.95	[-13.77, 6.25]	0.57	0.450	False
Income	Support	>100k INR	170	4.12	[-3.29, 11.34]	1.71	0.190	False
Income	Oppose	>100k INR	170	-1.76	[-8.48, 5.03]	0.24	0.628	False
Caste	Support	General	152	1.97	[-5.95, 9.80]	0.21	0.646	False
Caste	Oppose	General	152	-0.66	[-8.18, 6.90]	0.00	1.000	False
Caste	Support	Other	94	6.38	[-3.05, 15.32]	2.50	0.114	False
Caste	Oppose	Other	94	-5.32	[-13.05, 2.82]	2.29	0.131	False
Profession	Support	Farming	136	-1.47	[-6.91, 4.05]	0.17	0.683	False
Profession	Oppose	Farming	136	0.74	[-4.45, 5.88]	0.00	1.000	False
Profession	Support	Other	110	10.00	[-1.51, 20.84]	4.35	0.037	True
Profession	Oppose	Other	110	-6.36	[-16.65, 4.35]	1.89	0.169	False
Polarization	Support	High	116	1.72	[-5.47, 8.81]	0.12	0.724	False
Polarization	Oppose	High	116	-2.21	[-4.57, 4.57]	0.50	0.480	False
Polarization	Support	Low	130	-1.55	[-4.17, 14.63]	1.71	0.019	True
Polarization	Oppose	Low	130	1.97	[-14.12, 5.15]	1.14	0.028	True
Experience	Support	Bad	66	4.55	[-5.71, 14.31]	0.80	0.371	False
Experience	Oppose	Bad	66	-3.03	[-12.27, 6.54]	0.25	0.617	False
Experience	Support	Good	96	6.25	[-3.78, 15.80]	2.08	0.149	False
Experience	Oppose	Good	96	-2.08	[-10.55, 6.54]	0.12	0.724	False

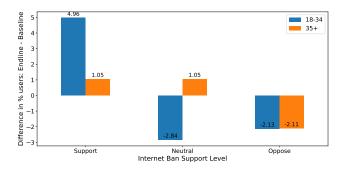


Figure 18: Change in support by their age bucket

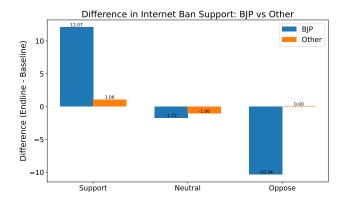


Figure 19: Change in support by party

We also tested by age. The age sample skewed younger. So we chose three buckets with roughly a third of our sample each. 18-24, 25-34 and 35+. Figure 18 shows the result.

Figure 19 shows change in support by party they voted for.

Figures 20, 21, 22, 23 shows the change in support by Education, Caste, Profession and Income respectively.

Difference in baseline polarization is shown in Figure 24. We see a clear difference with more polarized users reducing their support more.

Support for other purposes: We also asked users if they supported internet bans for certain types of cases. like preventing protests, preventing terrorism, preventing cheating in exams, preventing communal riots and, during elections.

Table 4 shows the significance values using McNemar tests.

Results in Figure 25. All 5 categories in Figure 31

Happiness and Life Satisfaction:

Figure 26 shows the absolute support. We see that overall, there is a lot more support. Figure 27 shows the results for 5 categories. Figure 28 shows the transitions for 5 categories.

Figure 31 shows all 5 categories for the support in other purposes.

Figure 29 shows the change in support by their reported experience.

Figure 30 shows the support per party.

Overall experience distribution: Figure 32 shows the distribution of the experience users had. Overall, around

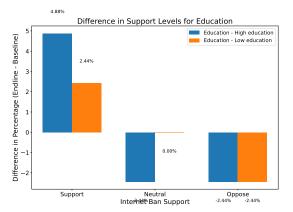


Figure 20: Change in support by education

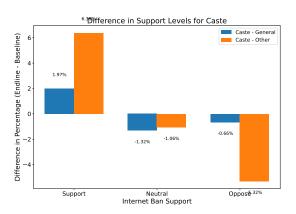


Figure 21: Change in support by caste

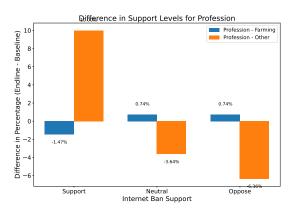


Figure 22: Change in support by profession

Table 4: Paired percentage-point changes with McNemar tests for other purposes.

Variable	Outcome	N	Change pp	95% CI	χ^2	p	Sig(<.05)
Prevent protests	Support	244	1.23	[-3.80, 6.22]	0.21	0.646	False
Prevent protests	Oppose	244	0.02	[-5.14, 5.14]	0.05	0.823	False
Prevent terrorism	Support	245	0.82	[-4.53, 6.13]	0.05	0.831	False
Prevent terrorism	Oppose	245	0.41	[-4.82, 5.63]	0.00	1.000	False
Prevent cheating in exams	Support	244	-2.87	[-10.11, 4.46]	0.80	0.371	False
Prevent cheating in exams	Oppose	244	4.51	[-2.03, 10.91]	2.86	0.091	False
Prevent communal riots	Support	244	4.31	[-3.41, 7.45]	0.70	0.404	False
Prevent communal riots	Oppose	244	-0.72	[-4.84, 5.65]	0.00	1.000	False
Prevent cheating in elections	Support	242	-4.55	[-12.33, 3.38]	1.89	0.170	False
Prevent cheating in elections	Oppose	242	5.79	[-1.93, 13.31]	3.38	0.066	False

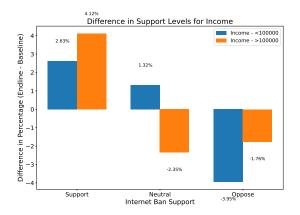


Figure 23: Change in support by income

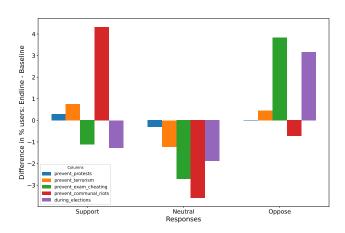


Figure 25: Difference in support for other purposes

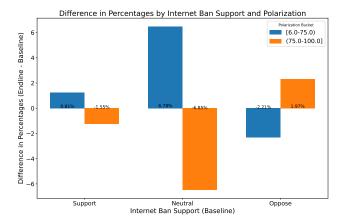


Figure 24: Change in support by political polarization response

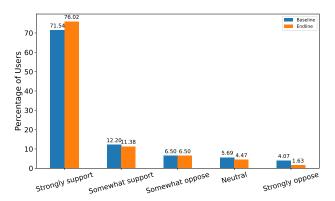


Figure 26: Baseline and endline support (all 5 categories)

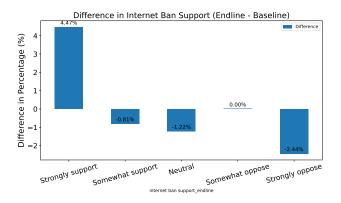


Figure 27: Baseline and endline support (all 5 categories)

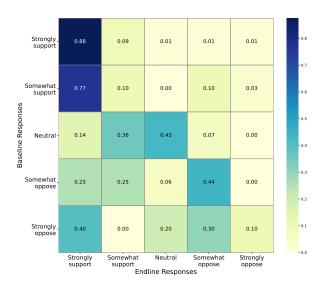


Figure 28: changes in baseline support (all 5 categories)

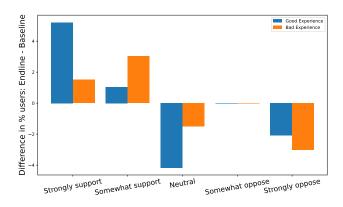


Figure 29: Change in support by their reported experience (all 5 categories)

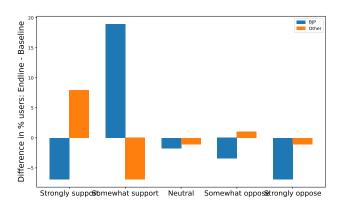


Figure 30: Change in support by party (all 5 categories)

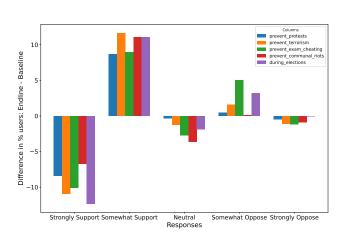


Figure 31: Difference in support for other purposes (all 5 categories)

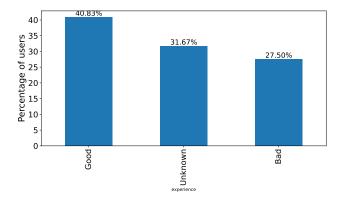


Figure 32: Users overall experience

40% reported having good experience, 27% bad experience and 31% did not report their experiences.

Polarization: 'On a 100-point scale, rate how favourably or warmly you feel towards people who support other political parties.' 'A rating between 50 and 100 means you feel favourably and warmly towards the group.' Figure 33 shows the change in polarization. We did not find any significant change in polarization (p = 0.69, significance tested using the Welch's t-test). From Figure 33, we can see that even though the average polarization decreased slightly. Participants exposed to the shutdown reported a baseline polarization score mean = 70.09, SD = 30.20 and an endline polarization mean = 70.744, SD = 31.07; mean difference = -0.653, 95 % CI for difference in means [-6.167, 4.87], t-statistic: -0.23, p = 0.69, degrees of freedom = 475.6 (computed using the Welch–Satterthwaite equation ((Satterthwaite 1946))).

Regression:

Regression results are shown in Table 5. Model 1 regresses respondents' endline support for internet bans on their baseline support, changes in reported political polarization, party affiliation (with BSP as the reference party), and a suite of demographic and socioeconomic controls. Baseline support is the only statistically significant predictor (positive and highly significant), explaining most of the model's predictive power ($R^2=0.28$).

Model 2 uses change in support (endline–baseline) as the dependent variable and substitutes change in polarization for baseline support. None of the predictors reach conventional significance levels, and the model explains little of the variance ($R^2 = 0.08$).

Polarization is measured on a 0–100 "feeling-thermometer" toward other parties; larger values indicate warmer feelings (less polarization). Overall, the results suggest that citizens' initial attitudes toward bans are the strongest driver of their later support, while shifts in polarization and the included covariates play a limited role in altering those attitudes over the study period.

7.6 Baseline Survey Questions

Demographics

• Phone Number: _____

Table 5: Regression Results

	Dependent variable:		
	Endline Support	Change in Suppor	
	(1)	(2)	
Baseline Support	0.442***		
	(0.061)		
Polarization Change	-0.001	-0.002	
_	(0.001)	(0.001)	
Party: BJP	-0.095	-0.165	
	(0.142)	(0.172)	
Party: Congress	-0.024	-0.143	
	(0.148)	(0.179)	
Party: Other	0.196	0.340	
·	(0.225)	(0.272)	
Party: Samajwadi	0.019	-0.049	
, ,	(0.152)	(0.184)	
Age	-0.003	-0.002	
	(0.002)	(0.002)	
Male	0.033	-0.017	
	(0.064)	(0.077)	
OBC	0.013	0.005	
	(0.044)	(0.053)	
SC/ST	0.079	0.084	
	(0.074)	(0.089)	
Log Income	-0.043	-0.028	
	(0.027)	(0.033)	
Education	0.002	0.001	
	(0.006)	(0.007)	
Constant	1.111***	0.555	
	(0.358)	(0.427)	
Observations	190	190	
R^2	0.283	0.083	
Adjusted R ²	0.234	0.026	
Residual Std. Error	0.244 (df = 177)	0.296 (df = 178)	
F Statistic	5.814*** (df = 12; 177)	1.465 (df = 11; 178	

Model 1 examines endline support for internet bans as a function of baseline support, Model 2 uses the change in support (endline minus baseline) as the dependent variable, add controls for changes in reported polarization. Both models control for party affiliation, demographic characteristics, and socioeconomic status. We have dichotimized our support measures for analytical ease.

Note:

*p<0.1; **p<0.05; ***p<0.01

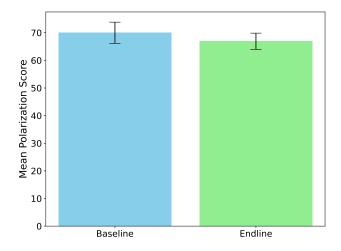


Figure 33: Change in polarization

- Other (22)	, ,
• Family Income in 2023:	
• Level of Education: = 16)	(5th grade = 5, Bachelor's
• Did you vote in the last e	lection?
- Yes (1)	
- No (2)	
- Can't remember (3)	
 Which party do you gene 	erally vote for?
– BJP (1)	
- Congress (2)	
- Samajwadi Party (3)	`
- Bahujan Samaj Party (4)
- Other (5)	doto mlom on mone mbous?
• Do you have an internet of	aata pian on your phone?
- Yes (1) - No (2)	
	to.
 Monthly spending on dat Number of phones with d 	lata plans in your household:
- Number of phones with a	ata pians in your nouschold.
• Do you have Wi-Fi/Broad	dband at home?
- Yes (1)	
- No (2)	
 Will you need the intern days? 	net for work in the next two
- Yes (1)	
- No (2)	
 Which of the following a 	pps do you use?
- WhatsApp (1)	
- YouTube (2)	
- Facebook (3)	
- Instagram (4)	
- ShareChat (5)	
App Usage	
 How much time did you on average last week? 	spend on WhatsApp per day
 Less than 10 minutes per 	• • • • • • • • • • • • • • • • • • • •
- 10-30 minutes per day (
- 31-60 minutes per day (9)
- 1-2 hours per day (10)	
2-3 hours per day (11)More than 3 hours per d	lov (12)
•	spend on YouTube per day
on average last week?	
- Less than 10 minutes pe	• • • • • • • • • • • • • • • • • • • •
- 10-30 minutes per day (
- 31-60 minutes per day (9)

- Pension/Rent/Dividends (21)

- 1-2 hours per day (10)
- 2-3 hours per day (11)
- More than 3 hours per day (12)

How much time did you spend on Facebook per day on average last week?

- Less than 10 minutes per day (7)
- 10-30 minutes per day (8)
- 31-60 minutes per day (9)
- 1-2 hours per day (10)
- 2-3 hours per day (11)
- More than 3 hours per day (12)

How much time did you spend on Instagram per day on average last week?

- Less than 10 minutes per day (7)
- 10-30 minutes per day (8)
- 31-60 minutes per day (9)
- 1-2 hours per day (10)
- 2-3 hours per day (11)
- More than 3 hours per day (12)

How much time did you spend on ShareChat per day on average last week?

- Less than 10 minutes per day (7)
- 10-30 minutes per day (8)
- 31-60 minutes per day (9)
- 1-2 hours per day (10)
- 2-3 hours per day (11)
- More than 3 hours per day (12)

Support for Internet Ban

- To what extent do you support or oppose governmentimposed internet shutdowns in a region for law and order?
 - Strongly oppose (6)
 - Somewhat oppose (7)
 - Neither support nor oppose (8)
 - Somewhat support (9)
 - Strongly support (10)

Statements on Internet Ban Please indicate your level of agreement with the following statements regarding internet access and internet bans:

- The government should be able to impose internet shutdowns during protests to prevent clashes.
 - Strongly disagree (6)
 - Somewhat disagree (7)
 - Neither agree nor disagree (8)
 - Somewhat agree (9)
 - Strongly agree (10)
- The government should be able to impose internet shutdowns to prevent terrorism.
 - Strongly disagree (6)

- Somewhat disagree (7)
- Neither agree nor disagree (8)
- Somewhat agree (9)
- Strongly agree (10)
- The government should be able to impose internet shutdowns to prevent cheating during exams.
 - Strongly disagree (6)
 - Somewhat disagree (7)
 - Neither agree nor disagree (8)
 - Somewhat agree (9)
 - Strongly agree (10)
- The government should be able to impose internet shutdowns to prevent communal riots.
 - Strongly disagree (6)
 - Somewhat disagree (7)
 - Neither agree nor disagree (8)
 - Somewhat agree (9)
 - Strongly agree (10)
- The government should be able to impose internet shutdowns during elections.
 - Strongly disagree (6)
 - Somewhat disagree (7)
 - Neither agree nor disagree (8)
 - Somewhat agree (9)
 - Strongly agree (10)

Wellbeing

- How happy do you consider yourself?
 - Very happy (5)
 - Fairly happy (6)
 - Not particularly happy (7)
 - Not happy at all (8)
- · How satisfied are you with your life?
 - Very satisfied (6)
 - Somewhat satisfied (7)
 - Neither satisfied nor dissatisfied (8)
 - Slightly dissatisfied (9)
 - Very dissatisfied (10)

Polarization

- On a scale of 0 to 100, how favorable do you feel towards people who support other political parties?
 - A rating between 50 and 100 means you feel favorably towards the group.
 - A rating between 0 and 50 means you don't feel favorably towards the group.
 - If you have no strong feelings either way, select 50.

Share WhatsApp Status

- Would you like to share this image on your WhatsApp status?
 - Yes (1)
 - No (2)

Screenshot Deactivation Instructions

- Step 1: Limit the access to data. We instruct participants to limit data usage to 10MB.
- Step 2: We instruct participants to take a screenshot of the app data usage screen.
- Step 3: We instruct participants to enable the app usage page and take screenshots.

7.7 Endline Survey Questions

Demographics

•	Phone Number:	
•	Name:	

Support for Internet Ban

- To what extent do you support or oppose governmentimposed internet shutdowns in a region for law and order?
 - Strongly oppose (6)
 - Somewhat oppose (7)
 - Neither support nor oppose (8)
 - Somewhat support (9)
 - Strongly support (10)

Statements on Internet Ban Please indicate your level of agreement with the following statements regarding internet access and internet bans:

- The government should be able to impose internet shutdowns during protests to prevent clashes.
 - Strongly disagree (6)
 - Somewhat disagree (7)
 - Neither agree nor disagree (8)
 - Somewhat agree (9)
 - Strongly agree (10)
- The government should be able to impose internet shutdowns to prevent terrorism.
 - Strongly disagree (6)
 - Somewhat disagree (7)
 - Neither agree nor disagree (8)
 - Somewhat agree (9)
 - Strongly agree (10)
- The government should be able to impose internet shutdowns to prevent cheating during exams.
 - Strongly disagree (6)
 - Somewhat disagree (7)
 - Neither agree nor disagree (8)
 - Somewhat agree (9)
 - Strongly agree (10)
- The government should be able to impose internet shutdowns to prevent communal riots.
 - Strongly disagree (6)
 - Somewhat disagree (7)
 - Neither agree nor disagree (8)

- Somewhat agree (9)
- Strongly agree (10)
- The government should be able to impose internet shutdowns during elections.
 - Strongly disagree (6)
 - Somewhat disagree (7)
 - Neither agree nor disagree (8)
 - Somewhat agree (9)
 - Strongly agree (10)

Wellbeing

- · How happy do you consider yourself?
 - Very happy (5)
 - Fairly happy (6)
 - Not particularly happy (7)
 - Not happy at all (8)
- How satisfied are you with your life?
 - Very satisfied (6)
 - Somewhat satisfied (7)
 - Neither satisfied nor dissatisfied (8)
 - Slightly dissatisfied (9)
 - Very dissatisfied (10)

Polarization

- On a scale of 0 to 100, how favorable do you feel towards people who support other political parties?
 - A rating between 50 and 100 means you feel favorably towards the group.
 - A rating between 0 and 50 means you don't feel favorably towards the group.
 - If you have no strong feelings either way, select 50.

Share WhatsApp Status

- Would you like to share this image on your WhatsApp status?
 - Yes (1)
 - No (2)

Screenshot and Enable Internet

- Steps for Screenshot and Reactivation:
 - Step 1: Limit the access to data. We instruct participants to limit data usage to 10MB. This turns off mobile data automatically, but it can be re-enabled if they know how.
 - Step 2: Participants are asked to take a screenshot of the app data usage page and scroll down to capture all apps.
 - Step 3: Participants are asked to enable the "Digital Wellbeing" app usage page, take a screenshot of it, and provide access to the app's usage statistics.

Study Experience

- Do you know anyone else participating in this study?
 - Yes (1)
 - No (2)
- If yes, how many people do you know who are participating? _____
- Please share your experience of living without the internet for the past 2 days. What did you do instead of using the internet, and how did it make you feel? (audio recording)
- Has living without the internet changed your perception of government-imposed internet bans? (audio recording)