

The Impact of Technostress on Emotional Labor of Full-Time Governance Staff in Ethnically Inter-embedded Communities: a Case Study of X Community in Wuzhong City, Ningxia

Xinyu Yang

School of Political Science and Law, University of Jinan, Jinan, Shandong, China

Abstract: While digital governance empowers grassroots communities, it also brings information Technostress which has a profound impact on the emotional labor of full-time community governance staff. Taking X Community in Wuzhong City, Ningxia as a case study, this research adopts qualitative methods including semi-structured interviews and participant observation to examine the specific manifestations of information technology stress and its influence mechanism on emotional labor among full-time governance staff in Ethnically Inter-embedded Communities. The findings reveal that information technology stress mainly manifests as technology overload, technology invasion, and technology learning burden. These stressors break the temporal and spatial boundaries between work and family, preventing governance staff from disengaging from their work roles after hours. Consequently, their emotional resources are continuously depleted, forcing them to increase surface acting while reducing their capacity for deep acting, ultimately leading to emotional exhaustion. This study reveals the process mechanism through which information technology stress generates emotional labor among full-time community governance staff, providing theoretical reference and practical implications for optimizing digital governance tools in Ethnically Inter-embedded Communities and alleviating the emotional burden of grassroots workers.

Keywords: Ethnically Inter-Embedded Communities; Emotional Labor; Information Technostress

1. Introduction

Grassroots governance has always been a priority and a challenge in the socialist governance system with Chinese

characteristics^[1]. In recent years, the deep embedding of information technology has provided an innovative pathway for empowering grassroots communities, driving the transformation of grassroots social governance toward digital-intelligent collaboration. In this regard, the state have attached great importance to this development. In 2022, the initiative to implement "Internet + Grassroots Governance" was proposed, providing top-level design support for the digital transformation of grassroots governance^[2].

However, digital tools intended to empower and reduce burdens have instead increased grassroots workloads, manifesting as repeated data entry, round-the-clock online responsiveness, and excessive documentation for assessment. This contradiction is particularly acute in Ethnically Inter-embedded Communities, where governance staff-including "two committees".members, grid coordinators, and assistant coordinators ,excluding building leaders, volunteers, and professional social workers,mustnot only handle routine administrative tasks but also bear implicit emotional duties. such as promoting ethnic unity, mediating custom-related disputes, and explaining ethnic policies. Information technology stress refers to the negative psychological state arising from difficulty in adapting to technology use demands.

This case study of X Community in Wuzhong, Ningxia examines how IT stress manifests among governance staff in Ethnically Inter-embedded Communities and how it affects their emotional labor, aiming to optimize digital governance tools and reduce grassroots workers' emotional burden.

2. Theoretical Basis and Analytical Framework

2.1 Emotional Labor Theory

Emotional labor, first proposed by Hochschild ,

refers to individuals regulating their emotions to meet organizational expectations. It involves two core strategies: surface acting, which means faking expressions without changing inner feelings, and deep acting, which means adjusting inner emotions to align with expectations^[3]. Diefendorff et al. introduced the concept of natural emotional expression, where individuals spontaneously display required emotions without deliberate effort when their genuine feelings conflict with job demands^[4].

In public service, emotional labor research has yielded rich findings. Studies show that full-time community governance staff frequently use both surface and deep acting in daily work, and surface acting is significantly linked to job burnout, emotional exhaustion, and turnover intention^[5]. Emotional labor serves not only as individual psychological regulation but also as an organizational survival strategy under structural constraints. Sun Lu found that neighborhood committees, due to resource scarcity and weak grassroots status, rely on members' surface acting to obtain policy resources for organizational goals^[6]. Guo Gen revealed that the negative effects of community workers' emotional labor mainly appear as emotional indifference and emotional frustration^[7].

2.2 Technostress Theory

The technostress is proposed by Weil and Rosen in 1977, which is an individual's negative psychological reaction when managing and using technology. Later, technostress was defined as an inability to healthily cope with demands from information systems, including five dimensions: technology invasion, technology overload, technology complexity, technology insecurity, and technology instability^[8]. The effect of technostress on job performance is a key topic in occupational health research. Existing studies show a close link between technostress and employee job burnout^[9]. Huang Jiazhen found that frequent use of WeChat at work increases civil servants' workload^[10]. At the root, organizations give technology practical traits through actors, which then shape actors' subjective perceptions. Specifically, institutional pressure indirectly affects grassroots civil servants' perceived technology burden through their IT capabilities and improper technology use^[11].

Research on technostress in public

administration remains nascent. Existing studies mainly focus on technology overload and job burnout among government officials, teachers, and medical staff^[12]. As digital governance reaches the grassroots, scholars have turned to technology burden there. Repeated data entry across apps, round-the-clock online response, and excessive documentation are emerging as new stressors for grassroots governance staff^[13]. Based on the two theories above, this study constructs an analytical framework. Information technology development widens the digital divide among elderly groups. This divide directly triggers emotional labor among community governance staff and also blurs the work-family border through trivial daily tasks, affecting their emotions and ultimately leading to emotional exhaustion and job burnout.

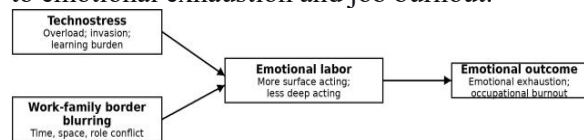


Figure 1. Analytical Framework of This Study

3. Single Case Study Design of X Community

3.1 Emotional Labor Theory

X Community in Wuzhong City, Ningxia was built in 2002, covers an area of 1.14 square kilometers, and has 126 residential buildings. Hui residents account for about 55% of the population, Han residents about 35%, and other ethnic groups about 10%. This study selects X Community as a case for its typicality in the following aspects.

First, its ethnically inter-embedded structure is typical. Community X is a multi-ethnic residential community with Hui, Dongxiang, Han and other groups living in deep spatial integration, offering an ideal setting to examine emotional labor in such contexts. Second, technostress is especially prominent. Staff must use multiple government apps, upload real-time photos, and respond instantly on WeChat groups while performing tasks from ethnic unity activities to dispute mediation and cross-cultural policy communication. Third, the case provides convenient research access. The researcher has good cooperation with Community X and can conduct participant observation and in-depth interviews with full respect for the community's and interviewees' wishes.

3.2 Data Collection and Research Methods

3.2.1 Data Collection

From January 5 to February 28, 2026, this study conducted semi-structured in-depth interviews

with 10 full-time community governance personnel and 2 community managers in Community X, focusing on key events and everyday experiences.

Table 1. Basic Information of Interviewees

No.	Gender	Age	Education	Working Years	Position
N1	Female	36	Bachelor	13 years	Community manager
N2	male	45	Junior college	19 years	Community manager
N3	Female	28	Bachelor	5 years	Full-time governance staff
N4	Female	31	Bachelor	3 years	Full-time governance staff
N5	Female	44	Junior college	17 years	Full-time governance staff
N6	Female	26	Bachelor	3 years	Full-time governance staff
N7	Female	37	Junior college	14 years	Full-time governance staff
N8	Female	39	Junior college	15 years	Full-time governance staff
N9	Female	28	Bachelor	4 years	Full-time governance staff
N10	Female	35	Bachelor	10 years	Full-time governance staff
N11	Female	50	Junior college	23 years	Full-time governance staff
N12	Female	30	Bachelor	7 years	Full-time governance staff

3.2.2 Research Methods

The transformation of technostress into emotional labor dilemmas among full-time governance personnel in ethnically interembedded communities is a complex process embedded in specific institutional environments and everyday interaction practices. Its internal mechanism is highly context-dependent and is not suitable for quantitative measurement detached from concrete settings. Therefore, this paper adopts a single-case study approach to provide an in-depth explanation of the process mechanism in a specific context.

At the analytical level, first, all interview recordings were transcribed verbatim and combined with field notes to form the original data set. Second, on the basis of repeated reading of the materials, core themes related to technostress, boundary blurring, and emotional labor were extracted according to the theoretical framework of this study. Third, the extracted themes were classified, compared, and refined to identify the logical relationships among them and to form a causal chain. Finally, typical interview quotations were selected as evidentiary support for the themes.

4. Research Findings

This study of 12 governance staff in X Community, Ningxia finds that technostress depletes their emotional resources by breaking the work-family border, forcing adjustments in emotional labor strategies and ultimately leading to emotional exhaustion.

4.1 Concrete Manifestations of Technostress: Overload, Invasion, and Learning Burden

4.1.1 Techno-overload: Heavy Tasks from Multiple Applications and Photographic Trace-keeping

Respondents generally have three or more work-related apps or mini-programs installed on their phones. Governance staff are required to take photos and upload them after completing each field task for documentation and superior inspection. This excessive documentation requirement pushes staff to complete more tasks rather than doing their work carefully. Moreover, X Community has a high proportion of elderly residents who generally cannot operate smartphones, adding a large amount of proxy work for full-time governance staff.

N1, a community manager: "Whether it is building a civilized city, census, anti-fraud campaigns, or safety hazard inspections, tasks from any government department have to go through us. We have several work apps on our phones, and we often need to take photos and upload them. Many colleagues complain that work apps take up too much phone storage. Sometimes after finishing something, we have to go back and take a photo later. We all feel it is a bit like formalism."

N3, a full-time governance staff: "The pension certification system requires facial recognition every year. Elderly people don't know how to use it, so we have to visit them to help. Sometimes the lighting or angle is wrong, and the recognition fails several times before it

works. We can only cover a few households in a whole morning."

4.1.2 Techno-invasion: Continuous Notifications from WeChat Groups

WeChat groups serve as the main channel for superiors to assign tasks, coordinate work, and announce performance reviews. Almost all respondents have joined at least three work groups. Messages in these groups are pushed continuously from morning to night, even late at night, on weekends, and during holidays. This constant technology invasion prevents governance staff from disengaging from their work roles during off-duty hours, keeping them psychologically on standby at all times.

N7, a full-time governance staff: "When my phone buzzes, my heart skips a beat. Especially at night, I just want to spend time with my kids, but then a leader @ me in the group asking for data or photos. If I don't reply, that's not an option, but if I do reply, I can forget about resting. And if I don't reply in time, I'll be criticized by name at work the next day."

4.1.3 Technology-related Learning Burden: System Updates and Operational Complexity

Frequent updates of government apps, inconsistent interfaces, and complex modules create significant learning pressure for older or less digitally literate governance staff. When organizations introduce new technologies with little employee support, individuals experience increased technostress, which can lead to emotional exhaustion and job burnout^[14].

N11, a 50-year-old full-time governance staff: "My eyesight is failing and the text on phones is too small. I just learned one system, but then it changes after a couple of months. Some menus are hidden where I cannot find them, so I have to ask colleagues. Asking too often makes me embarrassed. Also, each app has different login methods and password rules. Just remembering all these accounts and passwords gives me a headache."

4.2 Blurring of the Work-Family Border: Role Conflict under Techno-Invasion

Work-family border theory holds that individuals establish a work-family border to separate role demands across different domains. The permeability and flexibility of the border determine how smoothly role switching occurs. When border permeability is too high, work roles invade family life, leading to role conflict and emotional resource depletion^[15]. Through

investigation of full-time governance staff in X Community, we found that after returning home from work, these staff still need to continuously reply to work messages and monitor WeChat group activity using electronic devices such as phones and computers. Time originally meant for family rest is constantly encroached upon by work tasks, making the temporal and spatial boundaries between work and family increasingly blurred.

4.2.1 Disappearing Time Border: off Duty Does Not Mean off Work

Due to constant WeChat messages and online tasks, governance staff are frequently interrupted during their private time after work. Family time is taken up by work duties. Although they are physically at home, their minds remain occupied with work.

N10, a full-time governance staff: "My husband says I am 'body at home, soul at the office.' It is true. I keep thinking about which report hasn't been submitted, which message hasn't been replied to, or which resident's dispute hasn't been fully resolved so I need to visit again to provide comfort."

4.2.2 Blurred Space Border: Home Becomes the Second Workplace

Governance staff need to continue handling online tasks at home. Many respondents said that while eating at home, accompanying their children, or resting, they still need to type, upload photos, and reply to messages on their phones.

N2, a community manager: "Sometimes I get a call from an ethnic minority resident in the early morning and need to resolve it immediately. Especially with ethnic minority residents, if there is a delay and the resident reports it to a higher level, it becomes even more difficult to handle. Issues involving ethnic groups are very sensitive."

4.3 Changes in Emotional Labor Strategies and Emotional Exhaustion

Technostress continuously dismantles the work-family border, constantly depleting governance staff's emotional resources. In response to persistent work demands, their surface acting increases while their ability for deep acting declines, ultimately leading to emotional exhaustion.

4.3.1 Increased Surface Acting: Mechanical Responses and Professional Smiles

Facing constantly popping task demands in

WeChat groups and residents needing comfort, governance staff tend to adopt surface acting to protect themselves. Erich Fromm argues that emotional alienation is a process in which human spirit and psyche are dominated by external forces, and individuals in an alienated state lose their autonomy and inner richness^[16]. In the short term, surface acting helps governance staff meet job requirements, but in the long run, it severs the connection between external expression and inner feeling, gradually diminishing their emotional commitment to work.

N4, a full-time governance staff: "When I first came here, hearing residents talk about their family difficulties would make me feel sad too. I would almost treat their problems as my own. Now, I feel nothing inside. I say 'Don't worry, I'll help you figure it out,' but in my mind I am thinking about the next task that hasn't been done yet."

4.3.2 Declining Capacity for Deep Acting: Compassion Fatigue and Emotional Numbing

Rafaeli and Sutton found that when an individual's inner emotions are inconsistent with organizational requirements but the worker still needs to display emotional behaviors that meet those requirements, the individual tends to experience job burnout and emotional exhaustion^[17]. Deep acting requires governance staff to actively adjust their inner feelings and empathize with residents. However, under the continuous pressure of technostress, their empathic resources become overly depleted.

N5, a full-time governance staff: "In my first two years on the job, I always wanted to carry every household's difficulties on my shoulders. I treated every matter as if it were my own family's business. After a few years, I almost became depressed. Then I realized, I am not a savior."

4.3.3 Emotional Exhaustion: Burnout and Turnover Intention

When surface acting continues to increase and the resources needed for deep acting are exhausted, governance personnel enter a state of emotional exhaustion. Interviewees generally showed fatigue, a sense of meaninglessness, and turnover intention.

N11 (full-time governance personnel, 50 years old): "I have worked here for 23 years. Every day I am chased by my phone and urged by messages in the group, while residents still think I am not doing my best. Several young people in

our office are preparing for civil service or public-institution examinations; they all want to leave. It is not that this job is bad. It is just impossible to keep doing it. The phone gives us no room to breathe."

Overall, the technostress experienced by full-time governance personnel in Community X does not exist in isolation. Rather, it is intertwined with the special governance tasks of ethnically interembedded communities and the digital divide among elderly residents, forming an accelerating cycle of 'technostress - boundary collapse - emotional exhaustion'. The original intention of empowering grassroots governance through digitalization has, in practice, partly become an emotional overdraw on grassroots workers.

5. Discussion and Conclusion

5.1 Discussion

This study finds that technostress leads full-time governance personnel in ethnically interembedded communities to increase surface acting and experience a decline in deep acting by dismantling the work-family border, eventually resulting in emotional exhaustion and occupational burnout. This finding engages with existing research and extends it in the following three respects.

First, this study reveals the mechanism through which technostress affects emotional labor. Existing studies have often directly examined the correlations between technostress, occupational burnout, and emotional exhaustion, but have paid insufficient attention to the intermediate process through which stress is transformed into emotional outcomes. By introducing work-family border theory, this study finds that techno-invasion breaks temporal and spatial boundaries, preventing governance personnel from truly disengaging from their work roles after working hours and continuously depleting their emotional resources.

Second, this study extends research on emotional labor to the context of ethnically interembedded communities. It finds that, in a multi-ethnic community such as Community X, where elderly residents account for a relatively high proportion, the negative effects of technostress are significantly amplified. Ethnic unity activities create additional trace-keeping tasks; the mediation of disputes related to ethnic customs requires full-time community governance

personnel to invest sufficient time and energy in emotional regulation, yet this requirement conflicts structurally with the instant-response demands of technological systems; and the insufficient ability of elderly residents to use digital tools is transformed into a burden of proxy operation for governance personnel. These factors further intensify the time pressure and emotional depletion experienced by governance personnel.

5.2 Conclusion

Taking Community X in Wuzhong, Ningxia, as a case, this study uses qualitative methods, including semi-structured interviews and participant observation, to systematically examine the mechanism through which technostress affects the emotional labor of full-time governance personnel in ethnically interembedded communities. The study reaches the following conclusions:

First, technostress is widely present among full-time governance personnel in Community X, and is mainly manifested as techno-overload, techno-invasion, and technology-related learning burden. These stressors not only consume governance personnel's time and energy, but also break the boundary between work and family.

Second, the blurring of the work-family border is a key mediating mechanism through which technostress is transformed into emotional labor dilemmas. Online tasks after working hours and continuous WeChat group notifications prevent full-time governance personnel from truly disengaging from work. Their emotional resources are continuously depleted, forcing them to increase surface acting and weakening their capacity for deep acting.

Third, the particularity of ethnically interembedded communities amplifies these effects. Additional trace-keeping for ethnic unity activities, the conflict between the emotional work of mediating ethnic disputes and efficiency requirements, and the burden of proxy operation caused by the digital divide and old mobile phones among elderly residents expose full-time governance personnel in Community X to higher technostress and emotional costs than those in ordinary communities.

5.3 Research Limitations and Prospects

First, this study is based on a single community in Ningxia with features such as multi-ethnic population and old facilities. Whether the

findings apply to urban communities in eastern China or rural communities requires further testing.

Second, the fieldwork period was short and could not track the long-term evolution of governance staff's emotional labor under technostress.

Furthermore, in-depth interviews relied on staff's recall and narration, which may be affected by memory bias and impression management. It should be noted that there was gender imbalance in this study, with males accounting for only 17% of the total interviewees, which is another limitation of this research.

References

- [1] Zhang Fulei, Cao Xianqiang. The Operation Logic and Limitations of "Technological Governance" in Urban Grassroots Society[J]. *Issues of Contemporary World Socialism*, 2019(3).
- [2] Guiding Opinions of the State Council on Strengthening the Construction of Digital Government, Guo Fa [2022] No.14[EB/OL]. (2022-06-23). http://www.gov.cn/xinwen/2022-06/23/content_5697326.htm.
- [3] Hochschild, A. R. *The Managed Heart: Commercialization of Human Feeling*[M]. Berkeley: University of California Press, California, 1983.
- [4] Diefendorff J M, Croyle M H, Gosserand R H. The Dimensionality and Antecedents of Emotional Labor Strategies[J]. *Journal of Vocational Behavior*, 2005, 66(2): 339-357.
- [5] Timothy A. Judge, Erin Fluegge Woolf, Charlice Hurst. Is emotional labor more difficult for some than for others? A multilevel, experience-sampling study[J]. *Personnel Psychology*, 2009(1): 57-88.
- [6] Sun Lu. A Study on Emotional Labor of Urban Community Committee Workers: A Case Study of Hehua Street Community Committee in Yangzhou City[J]. *Theoretical Monthly*, 2019(06): 155-160.
- [7] Guo Gen, Wu Yang. Occupational Dilemmas and Adjustment Paths of Community Workers in Megacities: A Case Study of Sub-district Z in District P of Shanghai[J]. *Urban Problems*, 2022(08): 83-89.
- [8] Ragu-nathan T S, Tarafdar M, Ragu-Nathan B S. The Consequences of Technostress for End Users in Organizations: Conceptual Development and Empirical

- Validation[J/OL]. *Information Systems Research*, 2008, 19(4): 417-433.
- [9] Aldijan Bunjak, Matej Cerne, Ales Popovic. Absorbed in technology but digitally overloaded: interplay effects on gig workers' burnout and creativity[J]. *Information & Management*, 2021(8): 103.
- [10] Huang Jiazhen. Informal Organizational Change: Chinese Local Governments and Their Organizational Processes in WeChat Groups[J]. *Digital Governance Review*, 2017(00): 75-103.
- [11] Xu Xiaori, Yan Chaoyue. Research on the Generating Mechanism of Grassroots Civil Servants' Sense of Technological Overburden: Based on the Theory of Mutual Construction of Technology and Organization[J]. *Journal of Political Science*, 2023(03): 142-159+172.
- [12] Zhang Bei. ICT Stress, Organizational Identity and Civil Servants' Job Burnout[D]. Zhejiang University of Finance & Economics, 2021.
- Li Qi, Wang Anqi, Qiu Qian. Processes, Problems and Policy Implications of the Interaction Between Digital Technology and Organizations in Grassroots Governance: A Case Analysis of Smart Community Construction in Sub-district B[J]. *Journal of Northwest University (Philosophy and Social Sciences Edition)*, 2025, 55(02): 121-135. DOI:10.16152/j.cnki.xdxbsk.2025-02-012.
- [13] Anna Mette Fuglseth, Øystein Sørebo. The effects of technostress within the context of employee use of ICT[J]. *Computers in Human Behavior*, 2014, 40: 161-170.
- [14] Ashforth, B.E., Kreiner G.E., Fugate M. All in a Day's Work: Boundaries and Micro Role Transitions[J]. *Academy of Management Review*, 2000, 25(3): 472-491.
- [15] Li Jing. A Research on Erich Fromm's Theory of Psychological Alienation[D]. Northeast Normal University, 2015.
- [16] Rafaelia, Sutton R I. Busy stores and demanding customers: how do they affect the display of positive emotion? [J]. *Academy of Management Journal*, 1990(33): 625.