Coping with Emotional Labor in Call Centers: Design Approaches for Dealing with Emotional Dissonance

KWANGYOUNG LEE, Department of Industrial Design, KAIST, Republic of Korea

SOOYEON AHN, Department of Industrial Design, KAIST, Republic of Korea

JONGOK HONG, Department of Industrial Design, KAIST, Republic of Korea

HWAJUNG HONG, Department of Industrial Design, KAIST, Republic of Korea

The role of emotional labor in call center work requires employees to express specific emotions as demanded by the organization. However, displaying emotions that do not match one's internal state can result in emotional dissonance and lead to negative mental health outcomes, for instance, burnout and depression. In this paper, we propose a mobile-based intervention program that can help call center employees cope with emotional dissonance by enhancing the ability to recognize emotion and developing emotion regulation skills. In addition, we conducted a preliminary study to understand the context of call center employees and present a comprehensive design proposal for the intervention program based on design requirements derived from the findings of the preliminary study.

1 INTRODUCTION

Emotional labor refers to the effort, planning, and control required to express and manage one's emotions in a way consistent with organizational expectations and job requirements [6]. In many service-oriented professions, such as call centers, emotional labor is a crucial aspect of the job. Call center employees are expected to provide excellent customer service, even if they feel frustrated or upset, and they often modify their outward display of emotion to conceal their genuine emotions [1].

However, research has shown that surface-acting, referring to the process of faking or suppressing one's true emotions to comply with the required emotions, can lead to emotional dissonance [5]. If emotional dissonance is not managed properly, it can lead to negative mental health problems, such as stress and depression [11]. In contrast, deep-acting can be an authentic and sustainable way to manage emotional dissonance and improve mental well-being, as it involves a genuine effort to change one's internal emotional state in order to align with the desired emotional display rather than simply faking emotions [4].

Overcoming emotional dissonance can be challenging, but there are strategies that employees can use to manage emotional dissonance and reduce its negative impact on their well-being [3]. One important strategy is to increase

emotional awareness, which involves taking the time to identify and acknowledge one's true feelings rather than suppressing or ignoring them. By recognizing their emotions, employees can begin to understand how they are genuinely feeling and take steps to address any emotional dissonance. Another critical strategy for managing emotional dissonance is to develop emotion regulation skills. This involves learning how to manage one's emotions consistently with organizational expectations. Practical emotion regulation skills can be developed through training and practice, such as mindfulness, deep breathing, and cognitive-behavioral therapy [10].

In this paper, we propose a mobile-based intervention program that supports call center employees in managing emotional dissonance and improving mental well-being through deep-acting techniques. We conducted a preliminary study to gain insights into the context of call center workers and to design a better system that can serve appropriate interventions for our target users. The study consisted of surveys and interviews to identify key challenges and needs related to emotional labor and mental health in the workplace. We then discuss the findings of our preliminary study in more detail and present a design proposal for the smartphone application.

2 PRELIMINARY STUDY

To gain a deeper understanding of call center workers' context and current strategies for stress management, we conducted a large-scale survey of 143 call center workers and focus group interviews with six workers. Through the study, we identified 1) the work environment and stress levels of call center workers, 2) the main causes of stress (i.e., stressors), and the emotional and behavioral reactions to the stressors, and 3) coping strategies. Based on the results, we were able to identify design considerations and determine the direction for the design of our proposed system.

First, our findings indicate that call center workers perform highly demanding tasks in high-stress environments. They are required to handle an average of over 100 calls per day and write work-logs between calls. However, survey results revealed that the majority of participants (68.5%) reported only having 1-3 breaks per day, and 2.8% reported having no breaks during work hours. Moreover, 65.5% responded that having less than 10 minutes of break time indicates that break time is insufficient relative to their workload. The survey also employed the Perceived Stress Scale (PSS) [2] to understand the stress levels experienced by call center workers. The results (Mean: 17.5, SD: 5.14) showed that workers were experiencing high-stress levels, with 68% of respondents recording a score of 16 or higher, indicating a need for active stress management. Therefore, it is necessary to guarantee a minimum amount of break time and improve the work environment systemically, but it is also essential to help individuals recover quickly from stress, even with short breaks, by supporting them to reflect on themselves.

Second, we discovered that customers are the primary source of stress and intense emotional changes for call center workers. Specifically, 70.4% of survey participants identified conflicting with customers during service as the leading cause of stress. As emotional laborers, call center workers must display the positive affect demanded by the organization in any situation, which can result in emotional dissonance and mental harm as they suppress their genuine emotions. Moreover, they reported that a single encounter with a rude or aggressive customer could affect their mood throughout the day. Despite this, they also derive job satisfaction and positive experiences from successfully resolving customer issues and receiving positive feedback. Since call center workers have no control over the type of customer they will encounter, it is crucial to support them in strengthening and expressing their authentic selves regardless of the customer's behavior.

Finally, our study revealed that call center workers have their ways of coping with stress on the job. They primarily engaged in simple activities such as snacking, drinking, and smoking to relieve stress. While these activities may provide short-term relief, they can lead to negative consequences in the long run, such as weight gain and declining

physical function. During interviews, the workers expressed a desire to prevent work-related stress from affecting their daily lives, but they also acknowledged that simply ignoring stress was not an effective coping strategy. Therefore, it is essential to develop engaging but, evidence-based and healthy stress management strategies that address the underlying causes of stress. These strategies should focus on promoting sustainable and long-term health rather than providing only short-term relief.

3 SYSTEM DESIGN

We propose a system to help call center workers recognize emotional dissonance and improve their mental well-being in the workplace. This system is a smartphone application that facilitates accurate recognition of the user's emotional state and helps them recover from stress-induced damage to the mind. We designed the app incorporating design considerations informed by a preliminary study to make the interface intuitive and user-friendly. We utilized a battery metaphor to represent the user's mental state, making it easier for them to reflect on their current emotions through the remaining battery level. We minimized the burden of data entry for busy call center workers by using concise interactions. Additionally, we generated evidence-based content [8] that can be completed within 10 minutes for effective stress management during short breaks. The following sections will describe the app's main features and scenarios.

First, the proposed system allows call center workers to monitor and become aware of their emotional states. At the beginning of their work, the workers set their initial emotional battery level, which then gradually decreases at a predetermined rate as they carry out their tasks. The app's main screen (Figure 1-a) displays the workers' remaining battery level, which they can compare to their actual emotional state. If there is a discrepancy, the workers can update their battery level through self-reporting (Figure 1-b), which is accompanied by prompts to identify the reasons behind any changes in their mood. The system encourages users to enter factors as text and tags, with different tags generated depending on the battery state entered by the user. For example, tags related to the cause of stress are displayed when the battery has decreased, while tags related to factors that have improved the user's mood are shown when the battery has increased. The user's input data is stored in the history section at the bottom of the main screen's battery indicator, allowing them to track how their battery level has changed throughout the day. It is important to note that the system
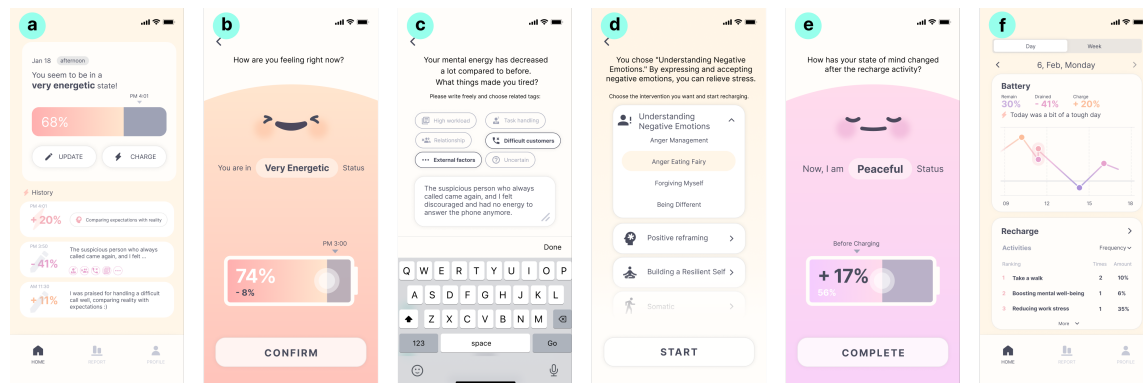

Fig. 1. Interface of mobile-based intervention program under development

does not solely rely on quantifying the battery level but also prompts users to identify reasons for changes in their mood.

Next, the system provides validated intervention content to help call center workers recover from emotional damage caused by conflicts or emotional incongruences with customers during work. The intervention content is derived from established psychotherapy techniques and includes mindfulness [7], cognitive reappraisal [9], and problem-solving methods. We selected microbreak activities that can be performed quickly within 10 minutes, considering workers' time constraints during short breaks in their busy schedules(i.e., providing a guide for users to repeat positive affirmations such as "I am capable of handling any challenge that comes my way" to help them build a more positive mindset). When feeling stressed or needing to recharge their emotional batteries, users can select one of the provided interventions displayed in the app (Figure 1-d). They can record how much their emotional state has been recharged after completing the chosen intervention (Figure 1-e). The system evaluates the effectiveness of the intervention by comparing the battery level before and after the recharge. At the end of the workday, the system generates a report that summarizes the data collected from the user (Figure 1-f). Through the report, users can view changes in their emotional battery and the effectiveness of the intervention options they used during the day. This information can help users self-reflect and develop personalized emotional regulation methods.

We would like to share our ongoing research at WISH 2023, and we welcome feedback from pertinent participants through either oral or poster presentations.

ACKNOWLEDGMENTS

REFERENCES

[1] Vicki Belt, Ranald Richardson, and Juliet Webster. 1999. Smiling down the phone: women's work in telephone call centres. In *RGS–IBG Annual Conference, University of Leicester, January*.

[2] Sheldon Cohen, Tom Kamarck, and Robin Mermelstein. 1983. A Global Measure of Perceived Stress. *Journal of Health and Social Behavior* 24, 4 (1983), 385–396. http://www.jstor.org/stable/2136404

[3] Christian Dormann and Dieter Zapf. 2004. Customer-related social stressors and burnout. *Journal of occupational health psychology* 9, 1 (2004), 61.

[4] Allison S. Gabriel and James M. Diefendorff. 2015. Emotional Labor Dynamics: A Momentary Approach. *Academy of Management Journal* 58, 6 (2015), 1804–1825. https://doi.org/10.5465/amj.2013.1135 arXiv:https://doi.org/10.5465/amj.2013.1135

[5] Alicia A. Grandey. 2003. When "The Show Must Go On": Surface Acting and Deep Acting as Determinants of Emotional Exhaustion and Peer-Rated Service Delivery. *Academy of Management Journal* 46, 1 (2003), 86–96. https://doi.org/10.5465/30040678 arXiv:https://doi.org/10.5465/30040678

[6] Arlie Russell Hochschild. 2015. The managed heart. In *Working In America*. Routledge, 47–54.

[7] Julie Anne Irving, Patricia L. Dobkin, and Jeeseon Park. 2009. Cultivating mindfulness in health care professionals: A review of empirical studies of mindfulness-based stress reduction (MBSR). *Complementary Therapies in Clinical Practice* 15, 2 (2009), 61–66. https://doi.org/10.1016/j.ctcp.2009.01.002

[8] Pablo Paredes, Ran Gilad-Bachrach, Mary Czerwinski, Asta Roseway, Kael Rowan, and Javier Hernandez. 2014. PopTherapy: Coping with Stress through Pop-Culture. In *Proceedings of the 8th International Conference on Pervasive Computing Technologies for Healthcare* (Oldenburg, Germany) *(PervasiveHealth '14)*. ICST (Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering), Brussels, BEL, 109–117. https://doi.org/10.4108/icst.pervasivehealth.2014.255070

[9] Martin E. P. Seligman and Mihaly Csikszentmihalyi. 2014. *Positive Psychology: An Introduction.* Springer Netherlands, Dordrecht, 279–298. https://doi.org/10.1007/978-94-017-9088-8_18

[10] JJ Van der Klink, RW Blonk, Aart H Schene, and FJ Van Dijk. 2001. The benefits of interventions for work-related stress. *American journal of public health* 91, 2 (2001), 270.

[11] Dieter Zapf, Marcel Kern, Franziska Tschan, David Holman, and Norbert K. Semmer. 2021. Emotion Work: A Work Psychology Perspective. *Annual Review of Organizational Psychology and Organizational Behavior* 8, 1 (2021), 139–172. https://doi.org/10.1146/annurev-orgpsych-012420-062451 arXiv:https://doi.org/10.1146/annurev-orgpsych-012420-062451