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Research article

Design Considerations for Mood-Regulation Interventions: Insights from a Case Study on the "Sunday Blues"

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Abstract

Design for mood regulation is an emerging design area that is gaining growing interest. However, there is limited guidance on what designers should consider when creating interventions (products, systems, or services) to support everyday mood regulation. To address this gap, we conducted an exploratory case study focused on the "Sunday Blues"—a common dip in mood experienced at the end of the weekend as the new workweek approaches. We designed WeMo, a system aimed at helping users capture weekend highlights, culminating in a visual summary displayed on Monday. We engaged 15 participants in co-constructing stories around their potential use of the system. Participants expressed frustrations with the system's features, concerns about its effectiveness, and obstacles to its application in daily life. Based on these insights, we highlight key considerations for designing mood-regulation interventions, such as balancing mood regulation with other fundamental needs, addressing the complex roots of mood, and respecting the acceptance of negative moods. By identifying user concerns and translating them into design considerations, this study provides actionable guidance for practitioners and contributes to the growing body of research in mood-focused design.

Key words: Case study; Design consideration; Design for experience; Interaction design; Positive design; Mood regulation

Introduction

Sometimes, we feel happy; other times, we feel sad. As we go about our daily lives, we might also feel relaxed, anxious, or even miserable. These inner feelings are what we commonly refer to as our "moods."

Moods are low-intensity, diffuse feeling states that typically persist for hours or longer (Morris, 1989). They are ever-present, tend to gradually evolve, and often operate below conscious awareness (Watson & Clark, 1994). Despite their subtle nature, moods have a profound impact on subjective well-being. When a person is in a positive mood, they tend to perceive their overall life as more satisfying and fulfilling, and they are more likely to recall positive life events compared to when they are in a negative mood (Morris,

1999). Beyond subjective well-being, moods can also significantly affect both physical and mental health. Persistent negative mood states can contribute to mental health problems such as depression and affective disorders (Peeters et al., 2006), and they have been linked to increased risk of physical health issues like heart disease (Cohen et al., 2015). Additionally, moods influence daily functioning by shaping how individuals perceive events, make judgments, and make decisions (Forgas, 1995).

Given the widespread impact mood can have on individuals, effective mood regulation is essential in everyday life (Larsen, 2000; Parkinson et al., 1996). This has encouraged designers and design researchers to explore innovative approaches—through products, systems, or services—to support or enhance mood regulation (Dejene, 2025; Desmet, 2015; Spillers, 2010). A recent scoping review by Peng et al. (2023) provides a comprehensive synthesis of various mood-regulation interventions, including physical products (e.g., MacLean et al., 2013), social robots (e.g., Ullrich et al., 2016), mobile or web-based applications (e.g., Agrawal et al., 2018), and immersive ambient environments (e.g., van de Garde-Perik et al., 2016). The review identifies diverse strategies used in these interventions, such as promoting self-awareness and reflection (e.g., Rajcic & McCormack, 2020), enabling mood-sensitive social interactions (e.g., Pradana & Buchanan, 2017), delivering personalized recommendations (e.g., Hollis et al., 2017), and fostering emotional regulation skills (e.g., De Luca et al., 2018).

While these findings provide a broad overview of intervention possibilities, the potential challenges and design considerations remain underexplored. Previous studies have briefly touched upon issues such as the possible negative effects of encouraging reflection on unpleasant feelings (Hollis et al., 2017), the difficulty of tailoring recommendations to individual users (Besserer et al., 2016), and user discomfort or annoyance caused by intrusive or poorly timed system interventions (Balaam et al., 2010). However, these insights are often tied to specific types of interventions or use cases and do not offer generalizable guidance on what designers should deliberately consider or be mindful of when designing for mood regulation. This lack of understanding can significantly hinder designers' ability to create effective mood-regulation interventions (Overdijk et al., 2022; Peng et al., 2023). To address this, we propose conducting empirical research to explore people's expectations, doubts, and concerns regarding using these interventions in everyday life. These insights can help identify key design challenges and inform future design strategies or principles.

To support this goal, we conducted an exploratory case study investigating prospective users' attitudes and opinions on a mood-regulation system designed to manage the "Sunday Blues"—a common negative mood that emerges during the transition from weekend to workweek. Findings from this case study shed light on end-user expectations and concerns, offering practical recommendations for the design of mood-regulation interventions in real-life contexts.

The remainder of this article is structured as follows: we begin by introducing the exploratory case study focused on the Sunday Blues phenomenon, followed by a description of our research process, including design and prototyping, participant recruitment, data collection, and analysis. Next, we report our findings and discuss their implications for future practice of designing for mood regulation.

Methodology

The Case Study

We selected the "Sunday Blues" as the focus of our case study—a mood characterized by anxiety, sadness, or regret as the weekend concludes and the new workweek approaches (Zuzanek, 2014). Its typical causes include the loss of leisure time, unmet weekend expectations, and

anticipation of upcoming workloads and challenges (Tufvesson, 2022). A recent survey suggests this mood issue is widespread among employees, with 80% of respondents reporting frequent experiences of it (Heitmann, 2018). Given its prevalence and impact on employees' mental health and well-being (Akay & Martinsson, 2009; Mihalcea & Liu, 2006), the Sunday Blues has gained significant attention in popular culture, with numerous blogs and podcasts addressing the topic and suggesting coping strategies (e.g., Headspace, 2021; Pinsker, 2020). Despite this, the phenomenon remains unexplored in scientific research, including within the design research community, highlighting opportunities to explore potential mood-regulation solutions. By designing an intervention to mitigate the Sunday Blues and investigating user insights, we aimed to uncover broader challenges and considerations related to design for mood regulation.

Design

We conceptualized WeMo (short for "Weekend" and "Monday"), a desktop and mobile application designed to ease the transition from weekend to weekday and mitigate the Sunday Blues. At its heart, WeMo encourages users to capture, reflect on, and celebrate meaningful weekend moments, which are then transformed into an artistic visual summary displayed on Monday.

The concept draws upon evidence-based psychological strategies for mood regulation, particularly the benefits of positive memory recall (Josephson, 1996) and gratitude (Rash et al., 2011). By prompting users to document and revisit highlights from their weekend, WeMo helps counteract the anxiety and sadness often associated with the end of the weekend. Rather than dwelling on the approaching workweek, users are guided to focus on their enjoyable weekend experiences, creating a sense of closure and readiness for the days ahead. Presenting their memories as a visual art piece on Monday seeks to foster positive anticipation and reinforce a lasting sense of satisfaction.

Specifically, WeMo offers four core functionalities:

- 1. Weekend Planner & Event Reminders. WeMo helps you transition to the weekend with a sense of excitement and anticipation. On Friday afternoon, while you're still at work, WeMo sends a cheerful notification to your laptop, such as, "Thank God It's Friday! Ready for your weekend plans?" This friendly reminder encourages you to review or finalize your plans, setting the stage for a fulfilling weekend. Gentle phone reminders during the weekend help you to stay mindful of your activities, ensuring you make the most of your time without feeling overwhelmed.
- 2. Photo-Taking Reminders. To help you capture and cherish your weekend highlights, WeMo sends personalized notifications based on your plans. For instance, a message might say, "Make this moment last! Snap a quick photo during your Forest Walk." These reminders encourage you to pause and appreciate special moments, with photos automatically stored in WeMo for later use.
- 3. Sunday Night Review. As the weekend comes to a close, WeMo invites you to reflect on your experiences with a message like, "Had a nice weekend? Upload more photos to keep those memories alive!" This feature allows you to revisit your favorite moments and cherish the joy of the weekend.
- 4. Monday Visual Summary. WeMo carries the weekend's energy into your workweek with a personalized visual summary that integrates your weekend's best moments. When you open your laptop on Monday, you're greeted with a colorful reminder of your weekend experiences, creating an uplifting start to your week.

Video Prototyping

To illustrate WeMo's functionality and user experience, we created a video prototype portraying key interactions between users and the system. We chose video prototyping to elicit feedback on a concept that is not yet technically feasible in its envisioned form (Wong & Mulligan, 2016). This approach allowed participants to immerse themselves in a realistic scenario and reflect on how the proposed design might fit into their own routines (Tognazzini, 1994; Zwinderman et al., 2013). Video-based scenarios are widely used in early-stage design research (e.g., Guo et al., 2024; Jin et al., 2024; McDonnell et al., 2023), particularly when exploring emotionally sensitive topics or future-use contexts, as they avoid the ethical and practical constraints of live deployment while still enabling rich user engagement.

Following the guidelines of Markopoulos (2016), the video was filmed in real-world contexts such as the workplace, home, and outdoor environments. It depicts a user journey across four key scenes, each aligned with a core feature of WeMo: (1) On Friday afternoon, a user updates their weekend schedules; (2) On Saturday morning, the user receives a notification about the "Forest Walk" event, and while enjoying the forest, they receive a photo-taking reminder and capture the scenery; (3) After a fulfilling weekend, the user reviews their photos and reflects on the weekend activities; and (4) On Monday, the user is greeted with a visual summary displayed on their laptop. Figure 1 presents several snapshots of these scenes, and the full video can be accessed through the provided link (https://youtu.be/HJbWA4fiOtA).

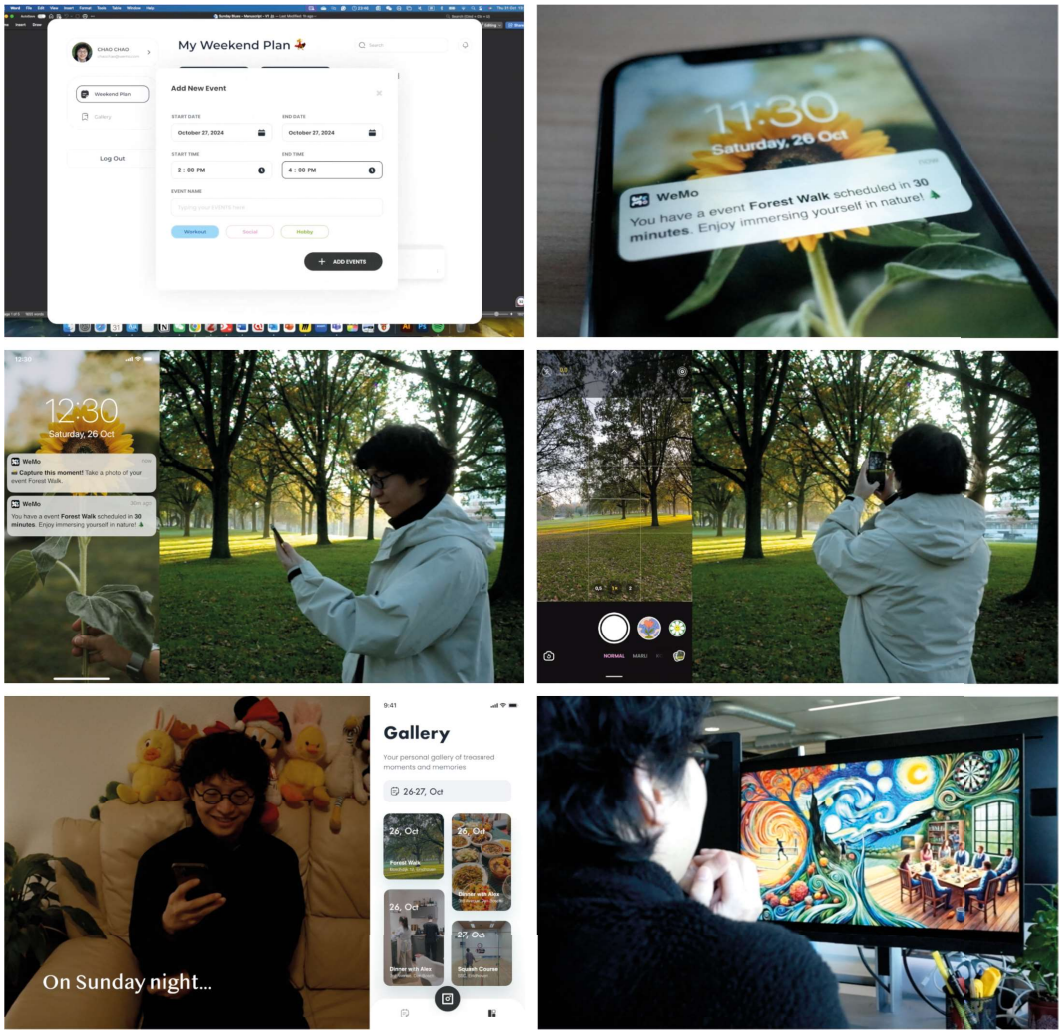

Figure 1. Selected scenes from the video prototype.

Participants

Fifteen participants (aged 24-33; 11 female, 4 male), predominantly researchers from higher education and technology sectors, were recruited through convenience sampling. Detailed demographic information is provided in Table 1. All participants were employed, typically started their workweek on Monday, and frequently experienced or had previously experienced the "Sunday Blues." The sample size was determined following guidance from Hennink and Kaiser (2021), who suggest that 9 to 17 interviews are generally sufficient to reach data saturation. Each participant received a five-euro voucher as compensation, and the study was approved by the Human Research Ethics Committee of Delft University of Technology (reference No. 5088).

Table 1. Overview of participants.

PARTICIPANT CODE	AGE	GENDER	INDUSTRY	OCUPATION	YEARS OF WORK EXPERIENCE IN CURRENT POSITION
P1	26	Female	Higher education	PhD Researcher	>1
P2	28	Male	Higher education	PhD Researcher	>1
P3	29	Female	Higher education	PhD Researcher	>3
P4	30	Female	Healthcare technology	Design Engineer	>2
P5	27	Male	Higher education	PhD Researcher	>2
P6	33	Female	Higher education	PhD Researcher	>1
P7	26	Female	Higher education	PhD Researcher	>2
P8	32	Female	Information technology	Design Engineer	>2
P9	27	Female	Higher education	PhD Researcher	>2
P10	26	Female	Higher education	Learning & Development Specialist	<1
P11	28	Male	Higher education	PhD Researcher	>2
P12	29	Female	Higher education	PhD Researcher	>3
P13	29	Female	Higher education	PhD Researcher	>2
P14	24	Female	Higher education	PhD Researcher	<1
P15	27	Male	Higher education	PhD Researcher	>1

Co-Constructing Stories

To facilitate meaningful conversations with prospective users, we employed the co-constructing stories method (Buskermolen & Terken, 2012), which involves engaging participants in direct dialogue to envision and articulate their thoughts about a proposed design based on personal lived experiences. This method has proven helpful in eliciting rich user feedback and suggestions in various design contexts (e.g., Cerón-Guzmán et al., 2022; Davis et al., 2016; Xue et al., 2019).

Following Buskermolen and Terken's framework (2012), each session was structured into two phases: (1) sensitization, aimed at surfacing participants' past experiences, and (2) envisioning, which encouraged participants to relate these experiences to the design concept and envision future contexts of use. A detailed guide for those sessions is provided in Table 2.

In the sensitization phase, participants first described their typical weekend routines and how they usually felt on

Sunday evenings. They then watched a short sensitizing video depicting a scenario of someone experiencing the Sunday Blues (available at https://youtu.be/hHyy3OJCzJY). To ensure a consistent narrative across phases, this video featured the same character and home setting as the subsequent WeMo video prototype. Afterward, participants were asked to reflect on personal experiences similar to the scenario and share strategies they had developed to cope with those feelings.

The envisioning phase began with participants watching the WeMo video prototype, which presented a fictional story of a user managing the Sunday Blues with the help of the application. After viewing, participants shared their overall impressions of the concept, including what they liked or disliked in the story. They were then encouraged to imagine themselves as the main character in the video, evaluating whether WeMo's four core features could effectively help address the Sunday Blues and identifying potential frustrations and concerns. Next, participants were asked whether they could see themselves using WeMo in daily life, and what barriers, if any, might hinder adoption. Finally, they connected their earlier shared experiences with the Sunday Blues to the design concept, offering suggestions for how it could be improved or adapted to better fit their personal contexts and needs.

Each co-constructing stories session lasted approximately 30 minutes, and all discussions were audio-recorded for subsequent analysis.

Table 2. Co-constructing stories guide.

PHASE	FOCUS	QUESTION OR ACTION
Sensitization	How participants usually spend their weekends	What do you usually do on weekends?
		Do you tend to plan your weekend activities, or do you prefer to just go with the flow? If you do plan, what's your usual approach?
		On Sunday night, do you ever look back on how your weekend went? How does that reflection usually make you feel?
	How we understand the Sunday Blues	The researcher displays the sensitizing video that explains a person's experience with the Sunday Blues.
	How participants usually experience and cope with the Sunday Blues	Can you relate to the person in the video? Did you experience the "Sunday Blues" in a similar way? Could you share a bit more about your experiences?
		How do you usually deal with those feelings? Do you have any specific strategies?
Envisioning	How WeMo specifically works	The researcher displays the video prototype that explains how WeMo functions.
	Participants' overall experiences with WeMo	What's your first thought about WeMo?
		What do you like (most) in the story?
		What do you dislike (most) in the story?
	Participants' micro experiences with WeMo's functionalities	How do you feel about this feature (i.e., Weekend Planner & Event Reminders, Photo-Taking Reminders, Sunday Night Review, or Monday Visual Summary)?
		Do you think this feature could work towards effectively addressing your Sunday Blues? Why?
		Is there anything about this feature that might annoy you or frustrate you? Why?
	Participants' attitudes towards using WeMo	Can you see yourself using WeMo in the future? Why?
		What, if anything, would stop you from using WeMo to help prevent your Sunday Blues?
	Participants' suggestions on WeMo's improvement	How do you think WeMo can be improved or adapted to better fit your personal life?

Data Analysis

All audio recordings were transcribed, and thematic analysis was conducted based on Braun and Clarke's framework (2006): (1) familiarization with the data; (2) coding; (3) generating initial themes; (4) reviewing and developing themes; (5) refining themes; and (6) reporting the results. To ensure reliability, two researchers collaborated throughout the process (Clarke & Braun, 2013). Familiarization occurred during transcription, so the first author began by independently coding all transcripts and generating initial themes, which produced a preliminary codebook. The second author then independently applied this codebook to the transcripts, critically evaluating the existing codes and themes while suggesting modifications and/or additions. Next, the two researchers discussed discrepancies and refined the categories until they reached a consensus, resulting in a more accurate and comprehensive set of codes and themes. Finally, this refined collection was reviewed and finalized by all authors when reporting the results. Our final coding scheme included 3 categories, 10 themes, and 37 codes, presented in Figures 2, 3, and 4, and further elaborated in the results section.

Results

Anticipated Benefits and Frustrations

Participants recognized several benefits associated with WeMo's four core features—Weekend Planner & Event Reminders, Photo-Taking Reminders, Sunday Night Review, and Monday Visual Summary. However, they also anticipated potential frustrations with these features when imagining how they might use WeMo in practice (see Figure 2 for an overview).

Regarding Weekend Planner & Event Reminders

Participants identified the potential benefits of a weekend planner with event reminders. Some saw it as a way to foster a positive weekend mood as early as Friday, with one noting, "It will already give me a feeling that the relaxing moment is coming" (P7). Others felt that it could help create concrete weekend plans more casually than using work calendars, while reminders could help prevent wasted time. These features were seen as contributing to more fulfilling weekends.

However, participants also expressed frustrations. Those favoring unstructured weekends were concerned that planning might feel like extending the workweek, as one stated, "I will feel I'm still on weekdays" (P2). Event reminders were seen as potential stressors, which could lead to user resistance if receiving excessive notifications. Additionally, participants mentioned that reminders might amplify disappointment if plans were missed due to spontaneous decisions like sleeping in.

Regarding Photo-Taking Reminders

Participants who often forget to take photos during weekend events considered reminders helpful for capturing memorable moments.

However, potential frustrations were also noted. Those already in the habit of taking photos felt repetitive prompts would be unnecessary, with one explaining, "I will be definitely taking pictures already" (P14). Participants who rarely take photos saw these reminders as burdensome, likening them to a chore. One compared the experience to another app, saying, "When I get the 'BeReal' notification, I do always see it as a task, as a chore. It doesn't really match with what I want to do on the weekend where I don't want any tasks" (P9).

Regarding Sunday Night Review

Participants noted several benefits of having a Sunday night review of weekend moments. Some regarded it as a distraction from anticipating the upcoming workload, while others saw it as an opportunity to practice gratitude for how they spent their time. Revisiting positive experiences was seen as fostering satisfaction with work-life balance, which could enhance motivation and preparedness for the week ahead. One

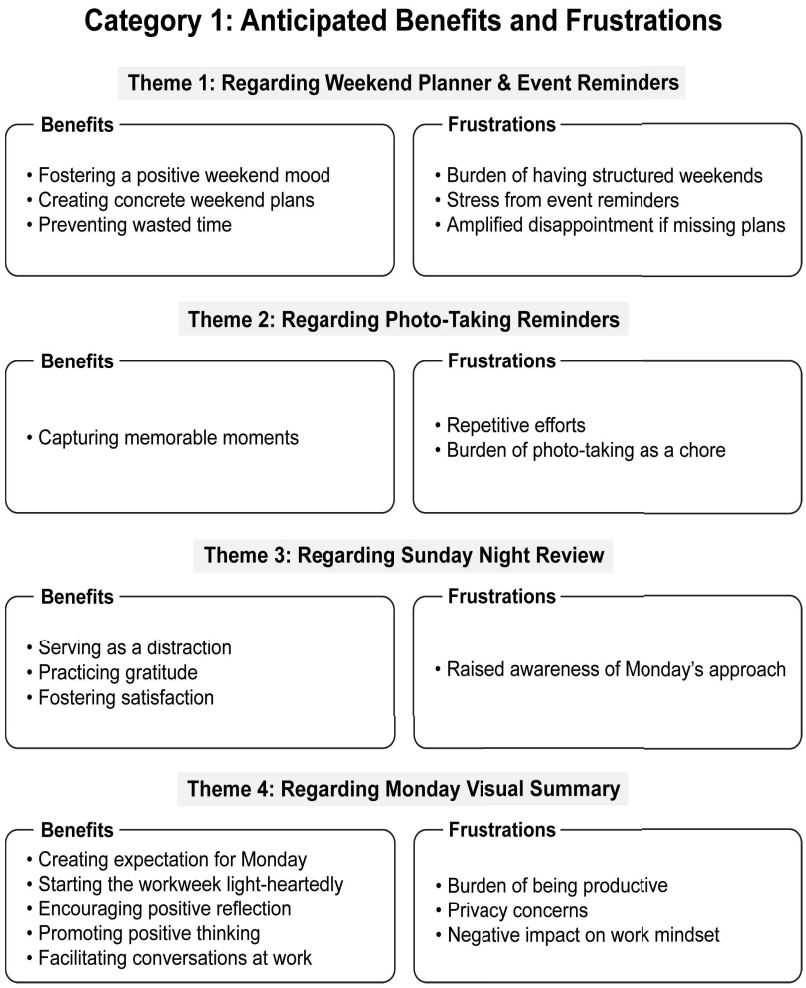

Figure 2. Overview of anticipated benefits and frustrations.

participant noted, "It will make me feel that I still have the energy to face the challenges in the coming week" (P7).

However, a key frustration was mentioned: a Sunday night reminder might trigger the Sunday Blues by raising users' awareness of Monday's approach. One participant remarked, "This kind of reminder can also be a reminder that your time is not so much—it's the end of your weekend" (P2).

Regarding Monday Visual Summary

Participants highlighted various potential benefits of a Monday visual summary. It could create expectation or motivation for Monday, as one explained, "You'd be more curious to go to work and see what's on your screen" (P10). It could also allow users to start the workweek more light-heartedly with "something that is not your email" (P8). The summary could encourage users to appreciate their weekends and themselves, as one shared, "It's like a reward for how nice you had the weekend" (P3). It was also seen as fostering positive thinking by highlighting that "a colorful weekend is coming up again" (P7). Additionally, its social value was noted: "It's a nice conversation starter … it would also stimulate fun because you can show the picture to your colleagues" (P10).

However, participants also mentioned frustrations. Some felt the summary might cause pressure to be productive during weekends, questioning its relevance for unproductive weekends. One participant asked, "What if there are no plans on a certain weekend and the whole goal is to chill, what would my image show?" (P13), anticipating it could lead to feelings of disappointment. Others raised concerns about whether the workplace is an appropriate setting for the summary, emphasizing privacy issues and potential negative impacts on their work mindset.

Concerns about Effectiveness

Participants raised several concerns about WeMo's effectiveness, pointing out factors that could influence its performance in real-world use (see Figure 3 for an overview).

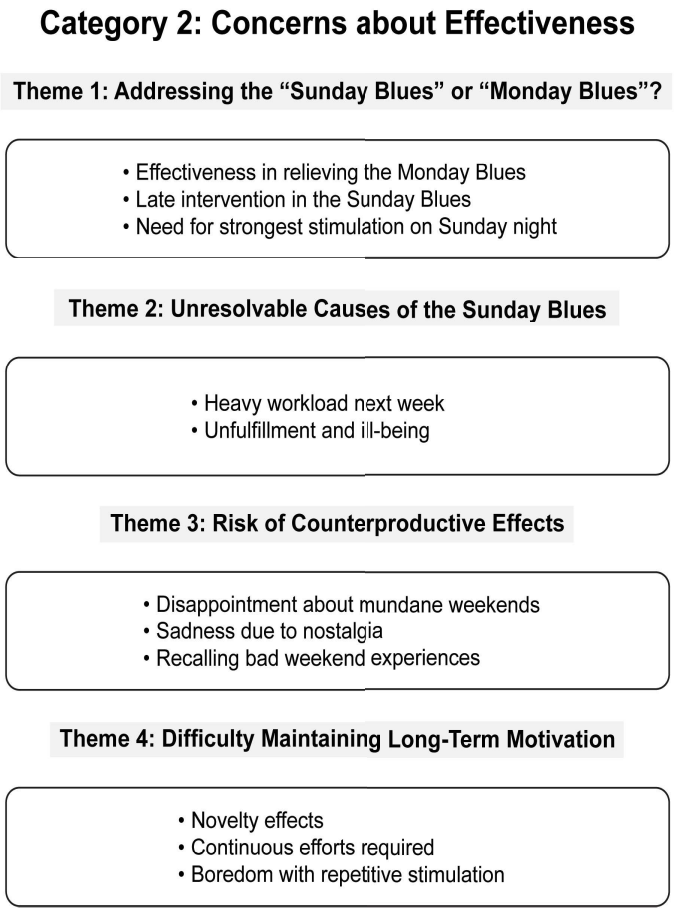

Figure 3. Overview of concerns about effectiveness.

Addressing the "Sunday Blues" or the "Monday Blues"?

Participants questioned whether WeMo would effectively target the "Sunday Blues" or if it would primarily address the "Monday Blues." They anticipated viewing a visual summary of the weekend on Monday could "make you feel not so anxious about your work" (P1). On the other hand, they also pointed out WeMo's delayed intervention in tackling the Sunday Blues. One participant remarked, "Is it a bit late for me? Because at some point, you already start to worry and become stressful about Monday" (P3). Another participant expressed a desire for WeMo to provide its most impactful support, such as the visual summary, on Sunday night, when they feel particularly "meaningless" (P12).

Complex Causes of the Sunday Blues

Participants mentioned that the Sunday Blues could stem from multiple causes, some of which might be impossible to resolve. While reflecting on weekend memories on Sunday night might uplift their mood, participants believed upcoming workloads could negate this benefit. As one put it, "If next week you still have five meetings to go, then probably the memories are not good anymore" (P3). Participants also noted that the Sunday Blues could be due to broader issues of personal fulfillment and well-being. One participant explained, "There's something about day-to-day life that's not really fulfilling you … that makes you already not happy" (P4), suggesting that addressing the Sunday Blues may require solutions beyond WeMo's scope.

Risk of Counterproductive Effects

Participants expressed concern that WeMo might inadvertently amplify feelings of the Sunday Blues. For instance, they noted that revisiting mundane weekends on Sunday night could lead to disappointment, as one explained, "If you only were laying on the couch and watching Netflix all day, then it may remind you of how unproductive your weekend was" (P10). Similarly, reflecting on particularly enjoyable weekends might induce a feeling of sadness, as one participant shared, "Sometimes [looking at photos] makes me more nostalgic" (P8). Additionally, there is a risk of reliving negative weekend experiences, with one participant warning, "It's also possible to remember not perfect or bad memories" (P3).

Difficulty Maintaining Long-Term Motivation

One participant specifically addressed the challenge of sustaining long-term user engagement. They described a "novelty effect" often associated with new apps (P11), which would fade over time. They

also noted the continuous effort required to engage with WeMo, which could feel burdensome and lead to user drop-off. Additionally, they mentioned that the visual summary could lose its appeal over time due to repetition: "Even though the content is based on your personal experience every week, the visual effect can be repetitive. If I see this for several weeks, I will probably get bored" (P11).

Perceived Obstacles to Application

Participants identified several barriers that might prevent them from incorporating WeMo into their daily lives (see Figure 4 for an overview).

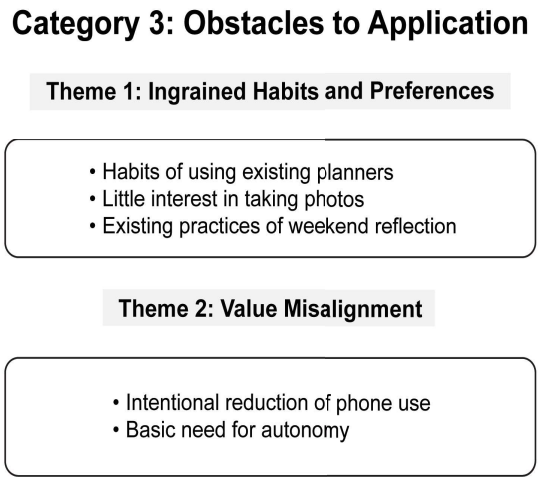

Figure 4. Overview of obstacles to application.

Ingrained Habits and Preferences

Participants noted that their long-standing routines and preferences could hinder their adoption of WeMo. For instance, some participants already rely on existing planning tools and see little need for an additional app. One participant explained, "I actually use Google Calendar as my planner, so I don't know if I would use another planner if it couldn't be synced" (P10). Others expressed a lack of interest in photography, which could prevent them from using the app since photo-taking is its key component. Additionally, several participants described alternative ways of reflecting on their weekends, such as sharing photos with loved ones or posting on social media. These existing practices reduced the perceived need for a dedicated app like WeMo.

Value Misalignment

Participants highlighted a misalignment between their values and those promoted by WeMo. Some participants strive to minimize phone usage and disengage from digital devices during weekends, as one stated, "I don't prefer having new apps on my phone. Maybe it is perfect, but then I feel it's too much about being on the phone" (P15). Others worried that WeMo might undermine their sense of autonomy during weekends. One participant noted that WeMo's structured approach could feel restrictive, stressing that the app should "show respect to the flexibility [of the weekend]" (P2). Additionally, WeMo's emphasis on generating visual summaries through photos felt overly prescriptive to participants. One commented, "It forces people to take pictures" (P11), which could lead to feelings of pressure or obligation.

Discussion

Mood regulation plays a vital role in everyday functioning and overall well-being. This has inspired the emergence of design for mood regulation as an important area of inquiry within design research. However, despite growing interest, there remains a limited understanding of the specific challenges designers encounter and the key considerations necessary for achieving effective design outcomes. To help address this gap, we explored a mood-regulation intervention targeting the Sunday Blues—a common dip in mood experienced on Sunday evenings—using it as a case study to surface the complexities involved in designing for mood regulation.

In this section, we reflect on our findings from the case study and present four key design considerations that can inform and guide future work in the field. We also acknowledge the limitations of our study and outline potential directions for further research.

Design Considerations for Mood-Regulation Interventions

Support Mood Regulation Without Undermining Fundamental Needs

Our findings reveal a potential tension in design for mood regulation: while interventions may effectively support mood regulation, they may also inadvertently conflict with users' other fundamental needs. For example, participants noted that organizing their weekends with various activities through WeMo could help them feel more fulfilled, potentially reducing the likelihood of experiencing the Sunday Blues. However, they also emphasized that this structured approach could significantly undermine flexibility and spontaneity, which they value as essential aspects of their weekend experience.

To address this tension, we recommend that designers proactively investigate and understand users' basic needs during the early design phase and thoughtfully integrate these considerations into the design process to ensure both intervention effectiveness and user experience.

Align Mood-Regulation Interventions with Existing Lifestyles

Our findings suggest that mood-regulation interventions relying on specific user behaviors may struggle with acceptance if they conflict with users' existing lifestyles. For instance, while participants acknowledged the potential benefit of WeMo in addressing their Sunday Blues, they expressed reluctance to adopt the system due to difficulties in implementing the required tasks. Some participants preferred to limit phone use on weekends and were unwilling to consistently take photos during events. Others had developed personal methods for planning or reflecting on weekends and were reluctant to invest in repetitive efforts.

These insights underscore that effective mood-regulation interventions should seamlessly integrate with users' established routines or preferences, minimizing disruptions and fostering sustained engagement without requiring significant behavioral changes.

Tailor Multiple Strategies to the Multifaceted Causes of Mood

Our findings reveal that a single mood-regulation intervention may be insufficient to address all the underlying causes of a negative mood, especially when these causes stem from broader, more complex problems. For example, participants acknowledged WeMo's potential to induce positive moods on Sunday evenings, such as feelings of satisfaction or anticipation. However, they also pointed out that the Sunday Blues is often a result of multiple factors, some of which—like unavoidable heavy workloads or personal ill-being—might fall beyond WeMo's influence. In such cases, the positive moods fostered by WeMo and the Sunday Blues might coexist as separate layers of experience.

To enhance effectiveness, we recommend a holistic design approach that incorporates multiple mood regulation strategies tailored to different types of stressors. For example, an intervention could facilitate avoidance or suggest direct resolution for identifiable and manageable stressors, while offering relief or distractions for stressors that cannot be easily resolved. This approach acknowledges the complexity of mood and enables more adaptive and personalized support.

Avoid Overemphasis on Positivity and Respect Acceptance of Negative Moods

This insight stems from our broader reflections on the research topic of designing for mood regulation. While the Sunday Blues can pose challenges to well-being, many participants appeared to have accepted this feeling as a normal part of their weekly rhythms. Rather than actively addressing it, they seemed to have found ways to live with it.

This raises an important concern: introducing a mood-regulation intervention could unintentionally increase individuals' awareness of the Sunday Blues, potentially

reframing it as a more serious issue than they had previously perceived. Such a shift in perspective could lead them to replace their existing, comfortable ways of coping with a new approach focusing on pursuing positivity at all costs. This might further disrupt their natural mood equilibrium, hindering their ability to accept and navigate negative moods in the long term.

Therefore, we urge designers and design researchers to exercise caution when offering mood-regulation interventions. These solutions should not overshadow the value of accepting negative feelings as a part of the human experience.

Limitations of This Study

This exploratory study has several limitations.

First, we relied on convenience sampling, recruiting participants exclusively from our university. Most are employed researchers with backgrounds in design and engineering, which may have biased their perceptions and thoughts due to a high level of familiarity with technology and design processes. Future studies should involve participants from a broader range of professions, demographics, and backgrounds for a more representative understanding.

Second, participants interacted with a video prototype rather than a fully functional system. As a result, their responses were anticipatory and removed from real-life use contexts. While video prototyping is a valuable tool in early-stage design, future work should involve the development and deployment of functional prototypes in longitudinal, real-world studies to capture deeper and more nuanced user experiences.

Third, the identified challenges and the resulting design considerations were derived from a single case study focused on the Sunday Blues. This may limit the generalizability of our findings to other mood-regulation contexts or user groups. Future research should explore multiple design cases targeting a range of mood states and situational contexts to validate and expand upon our findings.

Despite these limitations, we believe our findings offer valuable initial insights and can serve as a foundation for future inquiry into the complexities of designing for mood regulation and the practical considerations it entails.

Conclusion

In this article, we presented a case study exploring key design considerations for developing mood-regulation interventions, with a particular focus on the experience of the "Sunday Blues." Our findings suggest that effective interventions should address not only mood-related needs but also users' broader lifestyle patterns and other fundamental psychological needs. We also emphasize the value of incorporating different strategies to address the complex and diverse causes of user mood, as well as recognizing that negative moods are often accepted as a normal part of daily life for many individuals. These insights offer a starting point for understanding the nuances of designing for mood regulation, potentially guiding designers and design researchers in their efforts to create more thoughtful and effective solutions. We hope this study contributes to the ongoing development of this field and encourages innovative methods and tools that better support design for mood regulation.

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