



WHITE PAPER

The Workforce Behind Immersive Spaces: Building Resilience in Virtual Reality Safety Operations

A skill-action-support framework for moderators

What if you could be anywhere, with anyone, instantly? Now imagine if a predator also does this? What if your child meets them as a peer? In such immersive reality, who ensures safety?

Virtual reality (VR) reshapes the way we connect and engage by creating immersive experiences, bridging geographical divides. People interact via an avatar, a digital self, that creates a tangible sense of presence reinforcing the illusion of fully being in the virtual world.

The technology has found traction across diverse sectors such as gaming, training, education, virtual tourism, and beyond. A report from Statista (2025)¹ highlights that the AR/VR market is projected to grow to 3.7 billion users worldwide by 2029 which underscores the widening reach of social VR platforms.

With over 171 million global users currently, safety concerns on VR platforms have come to the fore, as per a Demandsage report.² Virtual spaces see a range of disruptive behavior, including hate speech, intentional violation of one's avatar, bullying and privacy concerns that can potentially spill into the real world even. The experience may be more intense, proprioceptive (sensing bodily movement, position, orientation) and in-the-moment as users inhabit the virtual space.

Given that the majority of active users are children and adolescents,³ VR moderation is an important trust and safety concern.

Traditional content moderation tools like AI-enabled filters for specific text or images, at present, are not sufficiently adaptive for immersive VR environments. This includes limitations with fully gauging context and cultural nuances, and the risk of incorrectly flagging content or failing to discern harms (false positives and false negatives). AI models may also perpetuate biases learned from the training data, may not effectively appraise dynamic user evasion tactics or detect sophisticated bad actors. Even as AI evolves to identify more complex behaviors, human judgment will remain crucial, acting as a vital and permanent safeguard particularly in immersive digital spaces.

This paper aims to systematically document the work and experiences of VR moderators, with an emphasis on promoting their health and wellbeing proactively. Through firsthand accounts of VR moderators obtained by means of qualitative research interviews and behavioral observations (see Appendix), this report explores the tangible opportunities and challenges of working in immersive virtual spaces.⁴

Drawing on these insights, we propose a proactive wellness framework to mitigate the psychological, cognitive and physical impacts inherent in VR moderation.

¹ Statista. (2025). AR & VR – worldwide. Retrieved from <https://www.statista.com/outlook/amo/ar-vr/worldwide>

² Kumar, N. (2024). Virtual Reality Statistics 2025: Users & Trends. Retrieved from <https://www.demandsage.com/virtual-reality-statistics/>

³ Ashworth, B. (2024). Meta Horizon Worlds has been taken over by Children. Retrieved from <https://www.wired.com/story/meta-horizon-worlds-taken-over-by-children/>



The evolution of safety work

Trust and safety, today, has a much broader landscape than a singular focus on **content safety** (i.e., traditional content moderation covering established practices of managing user generated content). **Gaming safety**, on the other hand, focused on the unique review needs for gaming spaces and increased the need for live moderation of content and behavior.

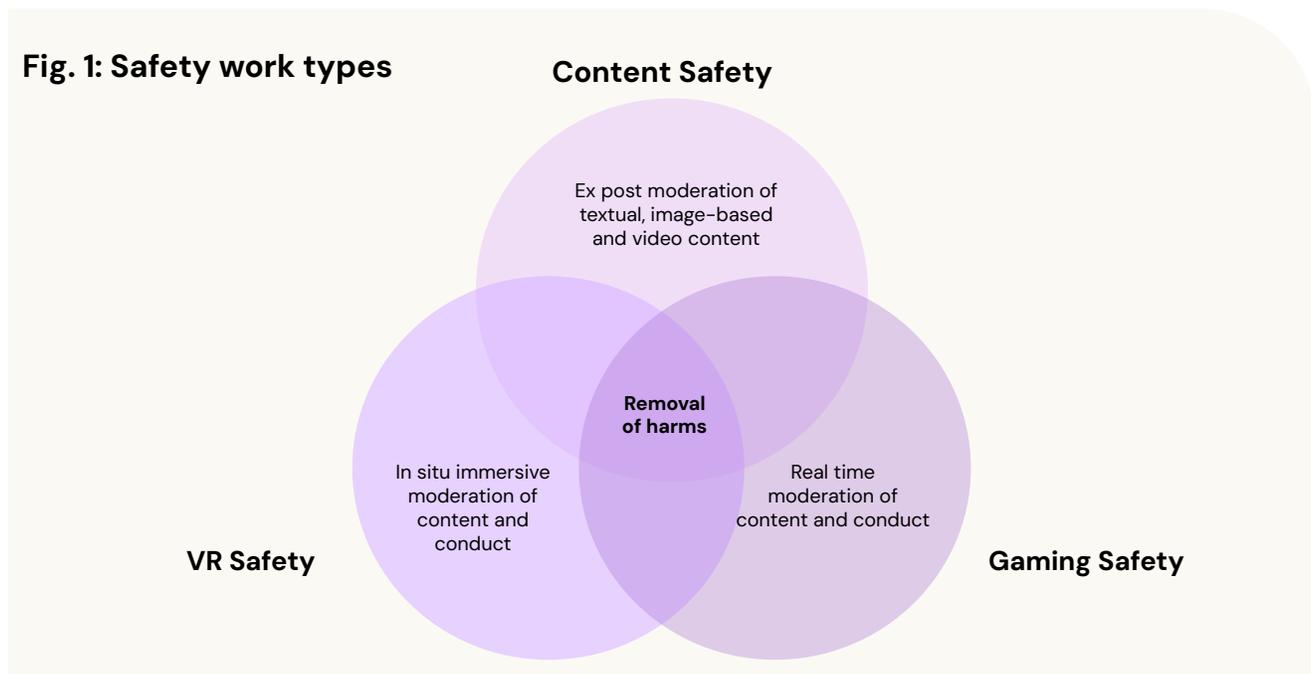
Now, **VR safety** adds a radical new dimension of immersion in the virtual space, thereby complicating safety work, given the real-time, embodied experiences of the environment and interactions.

Fig. 1 illustrates the shared and distinct nature of the three types of safety. The fundamental commonality across the three safety domains is the need to combat harms and ensure platform integrity. However, there are key differences stemming from their unique approach to moderation.

While content safety typically works in ex post fashion (reviews content after it has been posted), gaming and VR safety oversee user content and conduct in real time. Further, gaming safety relates to addressing in-game mechanics and live social dynamics, with a specific emphasis on fair play, cheating and game-specific toxic language/culture. This requires specialized expertise to maintain both fair play and safety through effective moderation.

VR safety further tussles with psychophysiological challenges that come with immersion (e.g., disorientation) while maintaining content and conduct integrity, thus requiring adaptation alongside real-time multidimensional moderation.

Literature on VR moderation is scarce despite a surge in virtual spaces ranging from socializing and gaming to mega-events. This calls for a closer examination of the unique facets and needs in this line of work.



⁴ Banchio, P. R. (2024). Legal, Ethical and Practical Challenges of AI-Driven Content Moderation. Retrieved from <https://download.ssrn.com/2024/10/12/4984756.pdf>

An inside view of VR moderators' work

The experience of immersion in VR requires the use of a headset to create 3D experiences of social interaction. **VR moderators directly immerse themselves by means of headsets and avatars in the virtual space to monitor user interactions in real time, identify potential issues and promote a positive community atmosphere.** Their supervision plays a vital role in building inclusive VR communities by safely connecting people.

One of the interviewees described their main function as, “creating a good community environment” through fostering interaction and directing users to different forums. Another interviewee highlighted that “keeping everyone respectful” is equally important.

Moderators are keepers of safety in the VR world, vigilantly enforcing platform rules and rapidly addressing disruptive behavior through warnings and removals, backed by detailed incident reporting. This blend of interpersonal aptitude, community building, and platform supervision defines a role critical in maintaining the integrity of the virtual space.

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Balancing the benefits and challenges of VR moderation work

Being a nascent profession, VR moderation presents novel and rewarding opportunities as well as unanticipated issues. To better conceptualize how balance may be achieved in this line of work, it is worthwhile to turn to the Job Demands–Resources (JD–R) model⁵ which postulates that employee well-being and motivation stem from a balance between job demands (stressors) and job resources (support).

The JD–R model aligns two psychological processes: stress process (excessive job demands and lacking resources leading to burnout) and motivational process (abundance of resources at work via engagement resulting in productivity and satisfaction).

This section examines how these two sides of the coin materialize for VR moderators.

⁵ Demerouti, E., Bakker, A. B., Nachreiner, F., & Schaufeli, W. B. (2001). The job demands–resources model of burnout. *Journal of Applied psychology*, 86(3), 499–512. Retrieved from <https://doi.org/10.1037/0021-9010.86.3.499>

Psychological rewards and motivations

The unique demands of VR moderation call for a highly passionate and skilled team. The interviewees distinguished their VR moderator role from traditional jobs or their former professions in the following themes:

01 Pioneer guardians of virtual worlds

VR moderators find profound meaning in building safe, inclusive communities, especially for young users, thereby directly impacting the positive evolution of novel virtual spaces. Work environment is generally perceived as “relaxed” yet “purposeful.”

Moderators have the opportunity to make a real difference by ensuring user safety – “I am interacting with other children. I want them to interact with a designated guardian that’s me, who is kind, and who makes them feel safe. It is meaningful and purposeful to me.” Another interviewee articulated the necessity of taking on protective and nurturing roles especially for vulnerable users, “Half of the time, I have to pull mama bear out of me. Be super patient because they don’t know how to read.”

The dynamic nature of VR demands constant creativity and adaptation, fostering personal growth and a stimulating work environment where diverse interactions lead to learning and the mastery of an emerging digital space.

02 Passion meets profession

For gaming enthusiasts, VR moderation offers a unique blend of personal passion and professional impact, turning their love for digital worlds into meaningful community contributions. Helping users from diverse backgrounds gain confidence in navigating the VR environment safely and building a unified community brings joy in this work, as a moderator conveyed, “Talking with people within the headset. It captures a specific demographic, more tech oriented people: my type of people.”

VR Moderators become dependable facilitators who share a similar enthusiasm with users for the VR space. This helps them implement safety policies effectively as they deal with largely like-minded users.



The hidden toll of VR moderation

As with traditional social media, harms are commonplace in interactive virtual environments too. VR moderators, being in the moment, encounter these risks live alongside users. The themes below enumerate the unseen challenges of moderating immersive VR spaces.

01 Cybersickness

More than half of the interviewees indicated that the extended use of the headset, despite frequent breaks, resulted in physical discomforts (especially in the early days) like disorientation and nausea, collectively referred to as cybersickness. This is consistent with external research studies on negative VR experiences among users.⁶ Moderators experience the challenge of reorienting to the real world on a daily basis – “It used to be a lot harder to come out of a headset and be in real life. Very disorienting at first. Migraines, light affect me weirdly... nausea.”

Nevertheless, regular use seems to stimulate adaptation. One of the interviewees described, “I didn’t know that I would develop tolerance, surprised by that.” Another moderator added, “I have my own headset, 2 years. No problem even (if I’m) in it all day,” indicating individual variability in the experience of cybersickness and the need for safe adaptation support.

02 Sensory overload

Moderators may also be overwhelmed by intense vigilance of high interaction volume in crowded VR spaces, resulting in sensory overload. As one moderator described, “A few days nothing but chaos. You can’t seem to get everyone to settle down. One after another, you have to take action.”

The chaotic nature of interactions and the constant stream of stimuli where misconduct or disarray can quickly erupt sets up a unique workplace. As one moderator expressed, “Once someone starts to do something, the rest of them get kind of rowdy and test the water to see if it is acceptable. A bunch of kids, one person does something, the rest follows suit.”

03 Amplified toxicity

The immersive feature of social VR further intensifies emotional experience as moderators witness firsthand or at times may be direct targets of hate speech, harassment, privacy violations, catfishing and potential real-world consequences.

One interviewee described the stream of toxicity they witnessed, “I can’t tell you how many times users start off by saying things like ‘go f*** yourself’ and using racial slurs.” Moderators have to maintain composure in real time amidst incivility. Yet, evidence of violative behavior also emphasizes the crucial role VR moderators play in safeguarding the community at large from such exposure.

⁶ Oh, H., & Son, W. (2022). Cybersickness and Its Severity Arising from Virtual Reality Content: A Comprehensive Study. *Sensors*, 22(4), 1314. Retrieved from <https://doi.org/10.3390/s22041314>



A few personal accounts of VR moderators demonstrate stress and moral conflicts experienced when addressing sensitive incidents—"One day, two of our colleagues had SSI (suicide & self-injury) incidents. We are supposed to escalate immediately. Anxious about when that will happen to me. I think I will be able to handle the situation, but I am anxious about how it might affect me." Another interviewee detailed a similar encounter, "Experienced one SSI, was worried. Protocol is to keep talking to them, if they want to play a game or go somewhere, accompany them. It becomes top priority."

This underscores the immense responsibility and emotional burden VR moderators shoulder, thus necessitating training in healthy coping skills.

04 Doxxing and gender specific risks

Beyond verbal harassment and hate speech, serious threats, such as doxxing, are also prevalent. Doxxing, intended for harassment, involves exposing others' sensitive information like name, location or even home address, potentially leading to real-world harm.

A few interviewees reported feeling apprehensive as a result—"In the headset, there are people who have been there forever. Subtle hints, like 'your southern accents,' telling us that they know we work where. It's uncomfortable to know that they know where we are."

It is important to acknowledge that the perceptions and expressions of challenges may also vary across demographics.

Female VR moderators are subject to distinct gendered concerns — an unease that resonated with all female moderators in the study.

One of them stated, "Being a female avatar we get harassed a lot. It tends to happen more at night." At times, the **over-sexualization of avatars** – with their exaggerated physical features and revealing clothes – intensifies the hostile environment.

Failing to account for these nuances in this context could lead to inaccurate generalizations of experience. For instance, female moderators expressed feeling more affected than their male counterparts when asked about the personal impact of toxicity encountered in VR. A male interviewee said, "I'm not very (impacted). If someone insults you, I'm like 'okay,' and move on. They don't know me." Whereas a female interviewee said, "Doxxing is an issue. I don't want us getting murdered. I'm really anxious about bomb threats." This highlights the necessity of inclusive solutions to support and alleviate VR moderators' challenges.

05 Blurred roles and ethical dilemmas

Traditional safety work focuses heavily on user safety. In VR, however, the persistent ambiguity between moderating behavior and fostering community simultaneously with multiple users in the moment, generates perplexities, as one of the interviewees expressed, "Am I reporting too much or too little?"



Even with established codes of conduct, VR moderators may deal with situations needing independent judgment calls, much like traditional content moderators. Guidelines, regardless of any platforms, while helpful, may not be comprehensive to cover all nuanced scenarios, necessitating all moderators to apply critical thinking and emotional intelligence.

In VR moderation, the added element of living communal spaces engenders evolving norms and conflicts that must be sensitively balanced with the platform’s policies. Thus, VR moderators need to demonstrate social intelligence while being on the lookout for harms and violations.

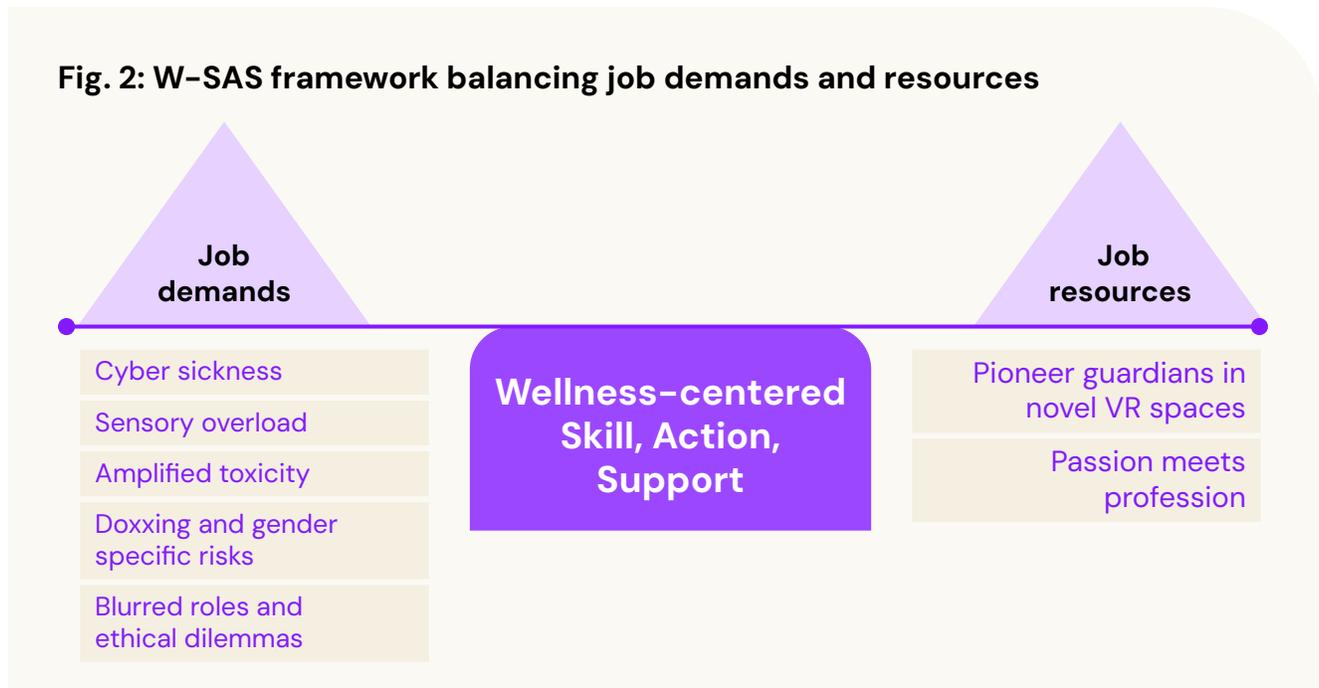
In a nutshell, VR moderators form a passionate and critical workforce shouldering the upkeep of virtual spaces who however face unique unprecedented challenges compounded by immersion, real-time threats and emerging unknowns. The onus of coping with these issues should not be upon moderators exclusively, and calls for a proactive systemic approach.

In response to the identified challenges, this paper next outlines a framework that integrates key theoretical insights towards fostering emotional detachment, physical well-being and robust social support.

An integrated approach to VR moderator wellness

The **Wellness-centered Skill, Action and Support (W-SAS) framework** emphasizes skill development, practical self-care actions and the design of robust support systems for guiding organizational wellness best practices in the VR moderation context.

The framework, illustrated below, subsumes the aforementioned JD-R model to facilitate an understanding of how VR moderators and employers can effectively balance job demands and resources by implementing W-SAS principles (akin to a fulcrum holding up a weighing scale) (Fig. 2).



Job demands represent the pressures, challenges and requirements of VR moderation, while **job resources** stand for the positive gains from the job. The extent to which W-SAS principles are incorporated will influence whether outcomes are positive (e.g., high performance, job satisfaction, wellbeing) or negative (e.g., low performance, burnout, stress, attrition).

Table 1 below elucidates the distinct challenges inherent in VR moderation, and the TaskUs approach to equipping its VR moderators with essential skill sets to cope and thrive on the job.

Table 1: TaskUs wellness best practices to support VR moderators

Challenges	Skills	Actions	Support
Cybersickness	A combination of technical expertise, sensory coordination, and self-regulation to navigate and adapt to the VR environment	Engaging in physical activity/contralateral movements, pacing one's sessions as per comfort	Gradual headset acclimatization is implemented to safeguard against cybersickness on an individual basis, with capped usage times, systematized breaks, and symptom monitoring. Flexible work schedules and microbreaks encourage adaptive self-care actions.
Sensory Overload	Mental control and flexibility	Utilizing breaks to reorient and ground oneself	TaskUs' flagship grounding program targets the deactivation of the sympathetic nervous system by engaging different senses.
Amplified toxicity	Emotional detachment and resilience	Seeking social support from colleagues and family	Group wellness & on-demand one-on-one sessions cultivate coping and resilience skills and enable debriefing for individual concerns.
Doxxing and gender specific risks	Critical thinking, problem solving	Limiting personal information sharing during moderation work	Awareness campaigns are aimed at improving digital literacy and information security. Proactive check-ins help leaders and management connect with VR moderators to address grievances and concerns and enable feedback sharing with clients.
Blurred roles and ethical dilemmas	Self-compassion, realistic thinking	Soliciting guidance from SMEs, document edge cases and share feedback	Clarity & transparency are prioritized by offering clear job details and posing targeted interview questions to assess traits and attitudes that support ethical reasoning and resilience.



The W-SAS framework emphasizes the **active role of the VR moderator and the organization in influencing work experiences and wellbeing**. By utilizing their internal and external resources, moderators can mitigate the negative effects of job demands and amplify the positive effects of job resources, leading to more favorable results. Organizations play a vital role in facilitating moderators' skills, action, and support that enable wellness-centered thriving in VR moderation at a systemic level.

Skills that counteract the demands of VR

Physical adjustment is the foremost criterion for sustaining in the job. VR moderators should be supported for gradual habituation to shift hours, to take regular breaks for movement and reorientation, and to adjust to optimal settings in the headset.

Socialization surfaced as another prominent skill, considering that VR moderation rests on fostering community and social engagement. VR moderators require varied socialization skills such as conflict management to pacify tense situations and maintain a nurturing environment, culturally sensitive communication to ensure fair and respectful interactions across diverse user bases, and the ability to stimulate constructive interactions aimed at creating positive experiences.

Notably, moderators underscored the need for **emotional detachment**, recognizing its role in maintaining professionalism, preventing burnout and ensuring objectivity. While some interviewees felt confident about achieving these, others were actively working to separate their personal feelings from the demands of the job, thus shedding light on the everyday dilemmas in VR moderation – “Men being creepy but not crossing the line. Being a mom, you notice something but have to wait. For example, there’s an old man talking to a little girl and you can see where he’s going. It’s hard to pull yourself back. Remind yourself that you are not that person’s mother.”

The dynamicity of VR also requires continuous **mental adaptation and flexibility** to shifting rules and codes of conduct. According to one of the VR moderators, “Rules are constantly changing and growing. Code of conduct will change. This is no longer this but that.”

Previous research has underlined that moderators endure stress in being responsible for resolving dilemmas where content policies have blind spots.^{7, 8} It is important that VR moderators be trained in stress management and cognitive flexibility to avoid the accumulation of such toll over time, similar to content moderators.

⁷ Gillespie, T. (2018). *Custodians of the Internet: Platforms, content moderation, and the hidden decisions that shape social media*. Yale University Press. Retrieved from <https://journals.sagepub.com/doi/pdf/10.1177/14614448231190901>

⁸ Stockinger, A., Schäfer, S., & Lecheler, S. (2025). Navigating the gray areas of content moderation: Professional moderators' perspectives on uncivil user comments and the role of (AI-based) technological tools. *new media & society*, 27(3), 1215–1234. Retrieved from https://books.google.co.in/books?hl=en&lr=&id=cOJgDwAAQBAJ&oi=fnd&pg=PA1&dq=related:J7GnXOQ-Lz8J:scholar.google.com/&ots=PiQEIUQKi7&sig=zPZI-TwW3yrgbU87GLq8zePCjy8&redir_esc=y#v=onepage&q&f=false



Best practices for skill development

Group wellness sessions, a TaskUs standard practice, provides moderators the opportunity for skill acquisition through resiliency training. For VR moderators, specific skills tailored to the nature of their work, are taught based on a monthly theme selected to bolster the brain's ability to distinguish between reality and simulation, alongside mitigating the potentially detrimental impacts of their work. One-on-one sessions are also offered to debrief upsetting content while being guided by a professional.

According to one of the interviewees, "Group wellness sessions are interesting a lot of times, especially now that we have gotten into more educational pieces, more neurological, brain stuff. I like that because I never went out of my way to learn about it."

Wellness support also continues even post employment in view of the potential long-term impact of such work.

"Group wellness sessions are interesting a lot of times, especially now that we have gotten into more educational pieces. I like that because I never went out of my way to learn about it."

Actions that support moderator well-being

Breaks are vital to combat social fatigue and sensory overload. Alongside pausing the psychophysiological impact of continual VR usage, breaks offer a sense of control and safety without the embarrassment of performing actions to reorient oneself.

In the words of one of the interviewees, "Walking around will help with regrounding... I find myself rubbing my face a lot to know that I'm real, I'm here." Flexible work schedules built within work shifts also enable time for physical activities and help alleviate strain.

Social support is crucial, with moderators finding relief through partnerships with colleagues and gaining practical and emotional support from their families. An interviewee recommended, "Partner up with other moderators so that you can keep it within earshot." Another participant relayed, "I need to extend my social battery. My husband takes the kids out of home for one hour after I get home. It has helped."

Consulting peers and subject matter experts (SMEs) was also cited as a useful way to reduce distress of new challenges.

Discretion with personal information sharing within VR is of paramount importance to ensure one's safety beyond work. Moderators should be encouraged to set boundaries with users and uphold their professional image.



Best practices for stimulating healthy actions

TaskUs offers grounding packages for psychophysiological wellbeing with tangible, deliberately chosen resources available for easy access within the workspace before and throughout a moderator's work in VR. These help VR moderators reorient themselves to the present moment and physical reality by evoking adaptive physiological and sensory responses. Grounding practices are introduced during onboarding to nurture resourceful habits before being immersed in production.

As moderators wrap up their shift, microbreaks are reserved to enable indulgence in **contralateral exercises**. These specific movements help reestablish **spatial awareness** and **depth perception**, effectively bringing back the physical and mental states of agents after demanding calls.



In addition, a **multi-faceted, biopsychosocial approach** that integrates various strategies such as creating flexible work schedules for physical activities, like stretching and walking, and having movement-friendly spaces facilitates physical well-being promotion.

Support that prioritizes safety

VR moderators highlight how **organizational support** helps in meeting and being guided on the novel demands of their work – "No penalty, just 'hey you should do this for future cases.'"

Moreover, **proactive check-ins from leaders and management** create the perception of a supportive climate. According to an interviewee, "Team leaders are really good at checking in to see if everything is alright. We're supported by management when one is not too used to a work environment." These reinforce a genuine concern for employee well-being.

Best practices for support creation

TaskUs nurtures the well-being of moderators through robust social support, encouraging peer alliances and valuing work-life balance.

In addition, a non-punitive, safe learning environment is created with proactive leadership check-ins. Pertinently, transparent disclosures from the point of recruitment empower moderators to make informed decisions about choosing this line of work and being productive. These practices in unison, enable moderators to meet work demands and ensure healthy performance.



Forging ahead

As VR technology evolves, immersion will potentially deepen and widen, with prospects for more intense sensory overload, ethical dilemmas, and newer social realities (positive and negative). Wellness in VR will need to be proactive and preventative, not just reactive. To support the well-being of VR moderators, wellness-informed practices that address unique challenges are recommended. Adapting interventions through the W-SAS framework can tend to VR-specific needs and concerns. **A combination of skills and actions on the moderators' part alongside systemic social support from the employer are instrumental to healthy VR moderation work.**

In the broader context of Trust & Safety too that now has multiple verticals as discussed at the beginning of this paper (content moderation, gaming safety, etc.), the W-SAS approach may be relevant to train for skills, prompt actions and offer social support that balances the demands and challenges in these evolving digital spaces. Further research is recommended to validate and inform the specific best practices for different workflows. Collaboration between technology developers, researchers and mental health professionals will be essential to promote wellness-informed safety operations.

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Appendix

Design

TaskUs conducted a qualitative research study in November 2024 to explore the lived experiences of VR moderators. The researchers performed contextual inquiry and individual interviews with VR moderators.

Sample

Five US-based TaskUs employees (3 female, 2 male) participated in the study and provided informed consent to be interviewed. They were employed in high-immersion VR moderation (i.e., they moderated using VR headsets and donning avatars to navigate virtual spaces). On average, participants had been working in VR moderation for 5 months.

Procedure

The study utilized a semi-structured interview guide with open-ended questions examining daily experiences, challenges, roles, positive encounters, strategies used to deal with challenges and more.

Interview data were transcribed and analyzed to identify common themes in experiences while also paying attention to unique encounters. This was supplemented with the researchers' insights while interacting with the interviewees.



About TaskUs

TaskUs is a leading provider of outsourced digital services and next-generation customer experience to the world's most innovative companies, helping its clients represent, protect, and grow their brands. Leveraging a cloud-based infrastructure, TaskUs serves clients in fast-growing sectors, including social media, e-commerce, gaming, streaming media, food delivery and ride-sharing, technology, financial services, and healthcare. As of March 31, 2025, TaskUs had a worldwide headcount of approximately 61,400 people across 28 locations in 12 countries, including the United States, the Philippines and India.

For more information, please visit:

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