Navigating the Duality of Technology Through Consent: Non-Western Perspectives on Teen Technology Use

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Teen technology use has been studied predominantly in Western contexts, often focusing on screen-time restrictions and parental controls. However, these one-size-fits-all strategies overlook the complexities of diverse cultural norms—particularly in non-Western settings where intergenerational relationships can be more hierarchical.

This workshop position paper intersects with ongoing research efforts in our lab, which examine sexual violence and safety in non-Western contexts. In particular, the first author draws on her personal experiences growing up in Tunisia—where technology was subject to strict rules—to illustrate how teen technology-use can become fraught in hierarchical family settings. We propose culturally grounded solutions that reposition technology not only as a source of potential problems but also as a powerful tool for negotiated, respectful, and consent-based engagement within families.

We hope these insights will enrich discussions on teen technology-use by highlighting how hierarchical family structures and non-Western cultural norms influence the duality of technology as both a risk factor and a catalyst for positive innovations.

1 Introduction

Teen technology use has been studied predominantly in Western contexts, often focusing on screen-time restrictions and parental controls [1]. However, these one-size-fits-all strategies overlook the complexities of diverse cultural norms—particularly in non-Western settings where intergenerational relationships can be more hierarchical.

This workshop position paper intersects with ongoing research efforts in our lab, which examine sexual violence and safety in non-Western contexts. These efforts are actively coordinated with researchers in Korea and Iran to explore how factors such as consent, cultural norms, and evolving technologies shape user experiences and potential risks in digital spaces.

In particular, the first author (Meryem Barkallah) draws on her personal experiences growing up in Tunisia—where technology was subject to strict rules—to illustrate how teen technology-use can become fraught in hierarchical family settings. Sections 2.1 and 2.2 are written in the first person to convey these lived experiences.

We then propose culturally grounded solutions that reposition technology not only as a source of potential problems but also as a powerful tool for negotiated, respectful, and consent-based engagement within families.

We hope that these insights will enrich the workshop discussions on teen technology-use, particularly by highlighting how hierarchical family structures and non-Western cultural norms influence the duality of technology as both a risk factor and a catalyst for positive, consent-based innovations.

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We conclude by introducing our ongoing research into designing safety conscious XR technologies, which we hope will spark discussion among workshop attendees regarding the dual role of technology in both perpetuating and mitigating interpersonal harm across diverse cultural settings.

2 Personal Context and Challenges

2.1 Strict Technology Use and Hierarchical Family Structure

When I was a teen, technology (computers, phones, gaming devices) was almost "forbidden" on school days, unless it served specific educational purposes. Parents had the authority to confiscate devices as a punitive measure for poor academic performance or misbehavior. This vertical dynamic—where the parent's word was final—resulted in a tense relationship with technology. Many peers in similar households faced restrictions that generated stress, secrecy, and an "all or nothing" view of technology usage.

2.2 The Toxic Cycle of Restriction and Rebound

Strict bans and punishments often led teens to overuse or misuse technology whenever they had unsupervised access—seeking out both harmful and harmless online content indiscriminately. Because devices were so heavily regulated, we never learned gradual, self-paced digital responsibility. Instead, we associated technology with rebellion and escapism. Once parental controls lifted, it was easy to fall into "binge" behavior or unsafe usage patterns. This dynamic perpetuated a toxic cycle of mistrust between parents and teens.

2.3 Technology's Duality: Problem vs. Potential Solution

Despite these negative experiences, technology itself is not inherently problematic. It offers vast educational resources, creative outlets, and social connections—especially vital in today's world. Recognizing this duality—technology as both source of conflict and opportunity—underscores the need for balanced interventions. Families and communities can transform technology from a forbidden fruit into a shared space of understanding, autonomy, and collaborative engagement.

3 How Non-Western Perspectives Broaden Global Understanding

Non-Western contexts, such as in Tunisia, often feature close-knit, extended family structures and a clear hierarchy between parents and children. This contrasts with many Western settings where child autonomy is emphasized. Including these perspectives highlights a variety of considerations. First, strict, top-down approaches to technology management can normalize fear or resentment, rather than fostering responsible use. Second, extended family members, religious leaders, or community figures frequently play a role in a teen's upbringing, offering alternative avenues for guidance beyond just parent-child interactions. Third, mainstream policies often assume Western familial norms (e.g., open dialogues, shared decision-making), overlooking the realities of non-Western households that may prioritize obedience over negotiation. Finally, acknowledging these cultural nuances allows for the design of interventions and guidelines that resonate with broader populations, thus informing a more equitable, global approach.

4   Proposed Solutions

4.1   Moving from "Parental Supervision" to "Shared Regulation"

4.1.1   Family Agreements and Consent. A vital step in restructuring teen technology use is transitioning from unilateral parental bans to consent-based family agreements [1]. Rather than imposing blanket restrictions, parents and teens can jointly determine acceptable device usage for schoolwork, creative projects, and socializing. This shared approach invites dialogue and negotiation, which can gradually reduce tension. For example, families might agree on set times and goals, such as using devices for two hours of leisure on weekdays, with more allowed for homework as needed. They could also schedule regular check-ins—weekly or monthly—to refine these guidelines, address concerns, and update usage limits. By engaging teens in the decision-making process, families cultivate a sense of autonomy and respect, thereby reducing the allure of "forbidden" technology and helping teens see devices as tools rather than contraband.

4.1.2   Co-Designing "Digital Contracts". Another practical strategy is to co-create digital contracts that outline responsibilities, privileges, and transparent consequences [2]. Teens and parents both sign off on agreed-upon terms, establishing technology use as a shared responsibility. Instead of confiscating devices entirely, families might scale back certain privileges (e.g., social media) when academic performance drops, or negotiate more flexible usage when grades or behavior improve. This approach fosters mutual accountability and trust, minimizing abrupt punishments that can trigger overuse or secrecy once restrictions are lifted. Teens develop self-discipline under the guidance of clearly articulated, consistently upheld agreements, rather than fear of sudden device withdrawal.

4.2   Harnessing Technology for Self-Regulation

4.2.1   Gamified Self-Monitoring Apps. Technology can also be the solution to some of its own problems. Apps that encourage teens to self-regulate screen time or social media usage can help them build healthier habits. Key design elements might include fun, rewarding features—such as virtual badges or points—and an emphasis on goal-setting and feedback. Teens could decide their own targets (for instance, no more than three hours on social media per day) and receive encouraging prompts rather than critical alarms when nearing limits. By giving teens control over their own boundaries, these tools reduce the perceived "surveillance" factor and increase internal motivation. Over time, teens develop self-awareness and accountability, seeing technology not just as an entertainment outlet but also as a means to track and refine personal behavior.

4.2.2   Privacy-Respecting Parental Involvement. Parents may still want to ensure safety without becoming intrusive. Privacy-friendly monitoring tools can provide broad usage statistics—like total time spent online or general categories of apps used—without revealing personal messages or detailed browsing data [3][4]. If usage surpasses a certain threshold, both parents and teens might receive a joint notification, prompting a family conversation rather than a unilateral crackdown. This balance addresses legitimate parental concerns (e.g., harmful content, cyberbullying) while respecting a teen's right to privacy and fostering trust and open communication.

4.3   Involving Extended Family and Community

Strict technology rules often arise from deeply ingrained cultural or religious norms, sometimes shared by the broader community. Harnessing extended family and communal networks can help reshape these norms and distribute responsibility for teen well-being [5]. In a consensual approach, teens can invite parents, grandparents, aunts/uncles, and

other community figures into the "circle" [3] of decision-making around technology use, ensuring each stakeholder's viewpoint is acknowledged while still centering the autonomy of young users.

Workshops and dialogues organized might include these extended family members or religious leaders, allowing them to share perspectives on healthy device use. However, rather than imposing guidelines, these trusted community members can offer insights that teens may choose to incorporate into their own digital habits. By treating technology planning as a collective conversation—rather than an externally enforced structure—teens are empowered to actively shape and uphold expectations that align with both their needs and family values.

Grounding technology use in a culturally attuned support structure allows teens to engage in mutual respect with elders while maintaining control over their digital experiences. This consensual, intergenerational process acknowledges that decision-making authority ultimately rests with teens, increasing their buy-in, reducing conflict, and fostering healthier, self-directed technology habits.

5   Discussion

The strict, hierarchical dynamic that the author (Meryem Barkallah) experienced as a teen underscores how technology can become hyper-sensationalized or demonized when families lack collaborative frameworks. These proposed solutions—shifting toward shared regulation, leveraging tech for self-monitoring, and involving extended community members—aim to reduce the toxicity that often arises from absolute bans or top-down prohibitions.

Moreover, consent emerges as a critical principle. By involving teens in the rule-making process, we transform technology from a symbol of parental control into a mutually negotiated resource. This approach resonates with many non-Western cultural values that emphasize collective harmony but also ensures personal agency for teens.

6   Conclusion and Future Directions

Non-Western perspectives, such as the author's (Meryem Barkallah) experience growing up in Tunisia, illuminate how traditional prohibitive models can damage teen-technology relationships. Integrating diverse cultural practices—like communal involvement, respect for elders, and the recognition of hierarchical family structures—can inform more equitable and globally relevant policies [6]. By focusing on consent-based family agreements, self-regulation apps, and privacy-respecting oversight, we can harness the dual nature of technology—addressing its potential harms while leveraging its unparalleled ability to foster creativity, connection, and learning.

Going forward, more empirical studies on designing digital contracts, gamified self-monitoring, and extended family interventions in non-Western contexts could further validate these solutions. Technology itself can serve not just as a challenge but as a collaborative space for building trust, agency, and intercultural understanding—ensuring teens worldwide can engage safely, productively, and happily with their devices.

Ultimately, our ongoing research is exploring safety-conscious XR technologies within online social contexts, aiming to prevent interpersonal and sexual violence. We hope to spark conversation at the workshop about XR's evolving role in perpetuating—and mitigating—harm in digital and physical spaces alike. By attending, we look forward to exchanging insights with other participants and jointly crafting pathways toward healthier, more respectful technology use for teens worldwide.

Author Bios

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mitigate harms and prevent nonconsensual behaviors in extended reality (XR) environments, as well as exploring the concept of consensual deepfakery.

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References

[1] S. Ali, M. Elgharabawy, Q. Duchaussoy, M. Mannan, and A. Youssef. Betrayed by the guardian: Security and privacy risks of parental control solutions. In *ACSAC '20: Proceedings of the 36th Annual Computer Security Applications Conference*, pages 69–83, New York, NY, USA, 2020. Association for Computing Machinery.

[2] M. Akter, A. J. Godfrey, J. Kropczynski, H. R. Lipford, and P. J. Wisniewski. From parental control to joint family oversight: Can parents and teens manage mobile online safety and privacy as equals? *Proceedings of the ACM on Human-Computer Interaction*, 6(CSCW1):1–28, 2022. Also available as arXiv:2204.07749.

[3] A. K. Ghosh, C. E. Hughes, and P. J. Wisniewski. Circle of trust: A new approach to mobile online safety for families. In *CHI '20: Proceedings of the 2020 CHI Conference on Human Factors in Computing Systems*, pages 1–14, New York, NY, USA, 2020. Association for Computing Machinery.

[4] L. F. Cranor, A. L. Durity, A. Marsh, and B. Ur. Parents' and teens' perspectives on privacy in a technology-filled world. In *Tenth Symposium on Usable Privacy and Security (SOUPS)*, Menlo Park, CA, 2014. USENIX Association. Open Access at USENIX.

[5] M. Akter, L. Alghamdi, J. Kropczynski, H. Lipford, and P. J. Wisniewski. It takes a village: A case for including extended family members in the joint oversight of family-based privacy and security for mobile smartphones. In *Extended Abstracts of the 2023 CHI Conference on Human Factors in Computing Systems (CHI EA '23)*, pages 1–7, New York, NY, USA, 2023. Association for Computing Machinery.

[6] D. A. Santisteban, M. P. Mena, and C. Abalo. Bridging diversity and family systems: Culturally informed and flexible family based treatment for hispanic adolescents. *Couple and Family Psychology: Research and Practice*, 2(4):246–263, 2012.