

Building Wearable Identities

Recommendations for Wearable Toolkits to Support Queer Expression

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1 INTRODUCTION

Queer identity research has largely focused on social media application usage, creating a knowledge gap as to how designers can improve the design of other technologies to support queer expression [2–4,6,8,9]. This is particularly relevant in the growing calls for designing technology to subvert the marginalization of underrepresented users [5,7]. Wearable toolkits offer a uniquely beneficial approach as they supply the embodiment of wearables while allowing users a greater control over different nuances of design, something that would prove useful when balancing the complexities of queer expression.

We conducted 16 interviews with queer individuals of various backgrounds on their queer expression and wearable technology experiences. Using our findings, we offer an initial set of design recommendations for wearable toolkits to facilitate queer expression. Our design recommendations highlight a unique set of challenges experienced by the queer community regarding expression and wearable technology. We highlight wearable toolkits as a uniquely positioned solution for the queer community and wearable designers to navigate the technological and sociocultural intricacies [1].

2 RECOMMENDATIONS

Participants emphasized queer expression as vital for sharing a sense of pride, queer visibility, avoiding misidentification and establishing community connections. Queer expression, however, is not without its barriers. Along with common examples of stigma and safety, participants shared issues of identity nuances, limited avenues for expression, and accessibility. While participants did share how factors such as their environment impacted them, for better or worse, these barriers often resulted in misidentification, dysphoria, and disassociation.

Participants highlighted a keen awareness of different wearable technology, ranging from more standard applications such as smartwatches to accessibility and health-based technologies (e.g., hearing aids, blood-glucose monitors). While positioning the queer community as extremely well versed in wearable technology, participants simultaneously shared several barriers to wearable use. This included cost, data safety, and health concerns with wearable use (e.g., obsessive calorie counting leading to worsening eating disorders).

Following our thematic analysis, we share several important considerations for the design of wearable toolkits with expressive components. Note that the following recommendations are not comprehensive and serve as discussion facilitator:

- Queer Semiotics: as a baseline, expressive toolkit components must incorporate meaningful and easily recognizable queer symbols (e.g., queer flags). Components should also be easily perceivable and understood by nonusers.
- Adaptability: users must be able to adjust the expressive elements depending on their current context easily and quickly (e.g., discreet display settings for queer elements).
- Customizability: toolkit components must be easy to interchange and personalize based on the user's desires. This applies to both hardware and software (e.g., diversity of sharable pronouns, configurable notifications).
- Accessibility: toolkits and their components' usage should be easy to obtain and use regardless of user's lived experiences (e.g., affordable, easily worn).
- Functionality: wearables designed should serve a distinct purpose that fits in with the user's lifestyle and needs (i.e., queer expressivity as complimentary to main functionalities).
- Safety: toolkit design should consider user's safety. Encapsulates bodily, emotional, and data safety.
- Aesthetics: the design of the toolkit should strive to make components pleasing.

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