





RESEARCH PAPER


From Mapping to Practice: A Guide and Evaluation of Feminist HCI Guidelines

Geslâne Rodrigues de Sena   [Federal University of Ceará | geslane.rodrigues@alu.ufc.br]

Kellen Raízy Noronha Monteiro  [Federal University of Ceará | kellenmonteiro@alu.ufc.br]

Maria Isabele de Oliveira Freires  [Federal University of Ceará | mariaisabele@alu.ufc.br]

Valéria Maria da Silva Pinheiro  [Federal University of Ceará | valeria.pinheiro@ufc.br]

Anna Beatriz Marques  [Federal University of Ceará | beatriz.marques@ufc.br]

 *Campus de Russas, Federal University of Ceara, Avenida Felipe Santiago, 411, Campo Federal, Russas, CE, 62900-420, Brazil.*

Abstract. Feminist HCI aims to explore how gender relations shape the use, interaction, and design of technologies and how we can address computational issues without perpetuating the marginalization of women or other groups. Despite its relevance, recent research has indications that the quality criteria proposed by Feminist HCI are not widely adopted. Thus, this research aims to identify guidelines that support interaction design and user interface according to Feminist HCI principles. The results of the Systematic Literature Mapping (SLM) allowed for the identification of design guidelines related to the collection and analysis of gender-sensitive data, the adoption of inclusive design strategies, and the promotion of public engagement. On the other hand, we found few guidelines for interface design in practice, such as using information that does not reinforce harmful gender stereotypes. Although the studies point out the benefits of Feminist HCI, such as promoting inclusion, contributing to equity, and preventing stereotypes, there are still many challenges, such as the need for further knowledge deepening, a lack of interest in creating inclusive guidelines, and a lack of consensus regarding criteria and practices. We noted that there are still no consolidated guidelines for adopting Feminist HCI in interactive systems design, which represents barriers to its adoption in practice. Thus, we refined the identified guidelines and created a guide to support inclusive design. We conducted a preliminary evaluation using the TAM model to assess the guide's usefulness, ease of use, presentation, and content. The results in this study demonstrated a positive perception among professionals with practical experience in HCI (Human-Computer Interaction) design, indicating that the proposed guide can contribute to the advancement of Feminist HCI and to reducing the gap between theory and practice.

Keywords: Guidelines, Guide, Human-Computer Interaction, Interaction Design, Feminist HCI

Edited by: Roberto Pereira  | **Received:** 22 April 2025 • **Accepted:** 23 February 2026 • **Published:** 15 March 2026

1 Introduction

Human-Computer Interaction (HCI) is a discipline dedicated to the design, evaluation, and implementation of interactive computer systems for human use, as well as the study of the main phenomena involved in them [Hewett *et al.*, 1992]. In recent years, with the growing integration of technology into all aspects of daily life, design has been influenced by social norms, including gender stereotypes that can reinforce inequalities. We can exemplify this with virtual assistants programmed with soft and submissive voices, associated with feminine characteristics, and incorporating visual elements related to sexualization, such as stereotypical gestures that refer to traits such as empathy [Craiu and Iancu, 2022].

To combat systemic biases, Feminist HCI has emerged as a field of study focused on denaturalizing gender norms and promoting an inclusive and empowering approach to technology design. This approach is rooted in critical theory and aims to foster equity and diversity in design practice. Initially defined by Bardzell [2010] and later developed in subsequent works, Feminist HCI challenges conventional notions of quality in interaction design by recognizing the importance of six quality criteria: pluralism, participation, activism, ecology, corporeality, and positioning [Bardzell, 2010; Bardzell and Bardzell, 2011].

Considering the fundamental relevance of Feminist HCI

and its significant theoretical contribution, its adoption in industry and software projects remains limited, with a persistent concern between theory and practice. Recent systematic analyses confirm this challenge. For example, a systematic mapping conducted by De Amorim *et al.* [2023] highlights Feminist HCI as a theoretical approach more focused on addressing gender issues in HCI, but concludes that most research still focuses only on identifying gender biases and problems, rather than providing practical guidelines or evidence of design solutions.

This gap in research reflects a disconnect between the critical framework offered by Feminist HCI and the concrete, practical tools needed by designers, who still point to a lack of clear implementation paths for the six quality criteria in development contexts [Bardzell and Bardzell, 2011; de Oliveira Freires *et al.*, 2024]. Although many studies address gender bias, in the case of virtual assistants, few provide accessible and integrated guidelines to help developers design solutions that effectively combat these biases.

To address this gap, the present study aims to shift the focus from problem detection to the design of solutions within the perspective of Feminist HCI, seeking to answer the following main research question: "How can interaction and user interface design be carried out from a Feminist HCI perspective?" This approach aims to make Feminist HCI principles directly accessible and applicable to design practitioners.

The main contribution of this work is the identification and synthesis of existing guidelines proposed in the context of Feminist HCI through Systematic Literature Mapping (SLM), which provided the basis for practical application [Kitchenham *et al.*, 2023; de Oliveira Freires *et al.*, 2024]. A structured guide was developed to broaden the applicability of Feminist HCI principles to interface design, and the Technology Acceptance Model (TAM) was used to validate the acceptance and use of new technologies, ensuring their relevance in the professional context [Venkatesh and Bala, 2008].

The article is organized as follows: Section 2 presents the context surrounding the topic of Feminist HCI; Section 3 presents related works; Section 4 discusses the methodology adopted for conducting the research; Section 5 presents the results of the systematic mapping; Section 6 presents the proposed guide and the preliminary results of the guide's evaluation; Section 7 contains the discussion of the research results; Section 8 presents the threats to validity; and Section 9 presents the research conclusions and future work.

2 Feminist Human-Computer Interaction

The emergence of Feminist HCI is a response to the growing awareness that, as technology becomes deeply integrated into everyday life, its design is often permeated by social norms and biases, particularly those related to gender, which can reinforce inequalities [Bardzell, 2010].

Feminist HCI seeks to understand how gender relations shape the use, interaction, and design of technologies and how we can solve computational problems without perpetuating the marginalization of women or any other social groups [Bardzell, 2010].

The theories surrounding Feminist HCI were first published by researcher Shaowen Bardzell (Indiana University) in 2010 [Bardzell, 2010] and later, in 2011, in collaboration with researcher Jeffrey Bardzell (Indiana University) [Bardzell and Bardzell, 2011]. These discussions engage with feminist contributions originating in the 1970s and 1980s, which problematize the relationships between knowledge production and practices of power [Harding, 2004].

These theories question the supposed objectivity of science and criticize the production of knowledge that often ignores or distorts the experiences of historically marginalized groups [Lima *et al.*, 2025]. In this sense, the perspectives of these groups, especially women, offer fundamental contributions that can broaden and renew traditional approaches in the field of technology [Harding, 2004; Gurung, 2020]. The field of HCI has evolved to incorporate these views, recognizing interaction from an intersectional gender perspective [Ribeiro, 2020].

The six quality criteria for interaction design proposed by Bardzell and Bardzell [2011] are central to the Feminist HCI approach. These criteria serve as a practical framework for implementing a feminist perspective in design:

1. Pluralism: Working with diversity, “denaturalizing normality”;
2. Participation: Valuing participatory processes for creating and evaluating design prototypes;

3. Activism: Seeking design solutions that do not practice oppression but empowerment;
4. Ecology: Determining the meaning of a given artifact, incorporating feminine value;
5. Bodification: Focus on the user's emotions, on their “being”;
6. Positioning: Make users aware of how the system works and its causes.

The main objective of Feminist HCI is to create approaches that cater to all diversities, taking feelings into account and empowering them to think. To do this, it is necessary to consider ways of applying Feminist HCI to design and implement appropriate technologies in line with quality criteria in different contexts [de Oliveira Freires *et al.*, 2024].

3 Related Work

To explore how feminist approaches have been treated in the field of HCI, Chivukula and Gray [2020] conducted a citation analysis from the article proposing the Feminist HCI approach by Bardzell [2010], the pioneer in the field. Among the results, Chivukula and Gray [2020] identified that the frameworks proposed by Bardzell [2010] for contribution criteria and feminist interaction qualities were rarely used, showing the potential for improving conceptual accuracy in future research and design outputs. One factor that can make it challenging to adopt the Feminist HCI approach is the gap between theory and practice.

De Amorim *et al.* [2023] research explored a deeper understanding of the nuances of gender in HCI, leading to reflection on the practical implications and challenges of incorporating a feminist approach into the interface design process. The research highlights the need to rethink traditional design processes, adopt different perspectives, and prioritize the participation of minority groups in developing technologies, which requires paradigm shifts that recognize the complexity of gender relations. At the same time, the research acknowledges the challenges of implementing feminist HCI in practice, such as the lack of knowledge and expertise among designers and developers and the difficulty of measuring the impact of feminist design initiatives.

Other recent works adopt the quality criteria proposed by Feminist HCI to evaluate [Ribeiro, 2020; Moro and Frigo, 2020; Paim *et al.*, 2020], technologies and propose the creation of guidelines for specific types of technologies, such as gamified technologies [Córdova *et al.*, 2022]. Ribeiro [2020] investigated how synchronous work meetings, facilitated by web conferencing and video calling tools, can perpetuate gender inequalities, especially after their widespread adoption during the COVID-19 pandemic. Based on the Feminist HCI theory (*Human-Computer Interaction*), the research reveals that these meetings often include harmful behaviors, such as frequent interruptions, idea theft, and inappropriate comments, which disproportionately affect women and non-binary people. The analysis with 96 participants confirms that these technological platforms replicate and sometimes intensify social oppressions, emphasizing the need to rethink online work tools to promote more inclusive environments.

The objective of the authors Moro and Frigo [2020] was to conduct exploratory research using an online questionnaire

to identify elements of Facebook interaction related to Feminist HCI. The questionnaire was divided into several sections, containing demographic information about users, their perceptions of the platform interface, and questions related to gender representation and inclusion. The results showed that users value greater autonomy and flexibility to express their identities within the platform, particularly in relation to gender expression. Based on these findings, the authors suggest the implementation of more personalized gender options and inclusive interface elements to promote freedom of expression and respect for diversity in social interactions.

Paim *et al.* [2020] analyzed the lack of accessibility in Brazilian Domestic Violence (BDV) reporting apps for women who do not communicate in Brazilian Portuguese, including deaf, immigrant, illiterate, and disabled women. The results indicated that these services are not inclusive, highlighting the need for Participatory Design activities to address these women's cultural and social specificities. This approach is part of the feminist interaction design agenda, aimed at developing a more accessible and inclusive technological solution.

Córdova *et al.* [2022] investigated a set of guidelines for creating gamified solutions from a Feminist HCI perspective, making the process more inclusive for all people. The methodology consisted of two parts. In the first part, a systematic literature review was carried out to identify the interrelationship between areas of study involving gender, Feminist HCI, and gamification. In the second part, interviews were conducted using questionnaires with game professionals, HCI specialists, and social professionals to understand the different perceptions on the subject. The results did not identify a pattern of incorporation of gamification from a gender perspective.

Although related works explore Feminist IHC in different contexts, they highlight the importance of investigating specific interaction design and user interface guidelines from this perspective [de Oliveira Freires *et al.*, 2024]. In addition, no reviews with a similar objective regarding the application of guidelines and validating the applicability of these guidelines with professionals in the field were found.

4 Methodology

To investigate the existence of guidelines related to the feminist approach to HCI and their contributions, the authors of the study [de Oliveira Freires *et al.*, 2024] employed SLM, a type of Systematic Literature Review (SLR) used to provide a broad overview of a research area, as well as to establish the existence of research evidence on a given topic [Kitchenham *et al.*, 2023]. With the results of the SLM, a guide was created containing the guidelines extracted from the selected articles, presenting each in detail.

Subsequently, the guide was evaluated by participants with various levels of experience. The evaluation was structured based on the TAM model [Venkatesh and Bala, 2008], to understand its perceived usefulness, ease of use, and behavioral intention. The guide and the form were made available to readers in portuguese (the access link is provided in Section 9).

The activities carried out were: (1) Systematic Litera-

ture Review, (2) Creation of the guidelines guide, and (3) Preparation and application of the TAM form. Each step of these activities will be described in detail in the following subsections.

4.1 Systematic Literature Review

According to Kitchenham *et al.* [2023], an SLR is a means of identifying, evaluating, and interpreting all available research relevant to a specific research question or topic, or a phenomenon of interest. The systematic review in the study [de Oliveira Freires *et al.*, 2024] is characterized as an SLM, which is a method used to identify, categorize, and analyze existing research on a topic [Kitchenham *et al.*, 2023]. The SLM followed three main phases, as described below:

1. **Planning:** This phase involves the definition of the research question, characterized by a clear and well-stated formulation of the questions the review intends to address, and the development of the review protocol, which includes the planning of inclusion and exclusion criteria, search sources, search strategies, and data extraction and synthesis methods.
2. **Search and Selection Procedures:** This phase covers the systematic literature search, conducted in scientific databases and other relevant sources using predefined keywords and search terms, followed by the selection of studies based on the inclusion and exclusion criteria established in the review protocol, and concludes with data extraction, which involves systematically collecting relevant information from the selected studies using standardized forms.
3. **Data Analysis and Synthesis:** This phase encompasses the analysis and synthesis of the extracted data with the objective of answering the research questions.

4.1.1 Planning

A systematic review is carried out formally and follows a pre-established protocol, unlike informal literature reviews, in which the researcher does not follow a defined process. SLRs require greater rigor in their execution, which makes their results more reliable, since they use a rigorous methodology that can be audited and repeated [Kitchenham *et al.*, 2023].

4.1.1.1 Definition of Objective and Research Questions

The objective of this SLM was structured using the GQM paradigm (*Goal-Question-Metrics*) [Basili, 1993], as illustrated in Table 1. GQM is a structured approach to defining research objectives, designing specific questions, and identifying relevant metrics.

The main research question that the SLM aimed to answer was: "How can interaction and user interface design be carried out from a Feminist HCI perspective?". In addition, the study sought to answer three secondary research questions:

- Q1. What guidelines exist for interaction and user interface design from a Feminist HCI perspective? This question seeks to identify the specific guidelines available in the literature within the period analyzed.
- Q2. In which contexts have the interaction and user interface design guidelines from a Feminist HCI perspective

Table 1. Defining the objective of Systematic Mapping based on the GQM paradigm.

Analyze	Scientific publications through a study based on systematic mapping
For the purpose of	Identify existing guidelines
In relation to	Interaction and user interface design
From the point of view of	Researchers
In the context of	Feminist HCI

been adopted? This question allows for examining the scope of the guidelines across different domains.

- Q3. What are the benefits and challenges of adopting the interaction and user interface design guidelines from a Feminist HCI perspective? This question aims to highlight the practical implications of using the guidelines, emphasizing both their value and the potential barriers to future adoption.

4.1.1.2 Identification of Publications and Search Scope

The following describes the decisions made about the scope of the search, the languages included, the terms used, the search *string*, and the article selection criteria.

The search was carried out in the digital libraries Scopus¹, ACM Digital Library², IEEE Xplore³, and SBC-OpenLib⁴, which allow the use of logical expressions for searches or a similar mechanism to locate publications through the title, abstract, and other relevant criteria of the publications. In addition, Scopus, ACM, and IEEE Xplore are known for covering a wide range of journals, conferences, and academic magazines in the field of HCI, and SBC-OpenLib covers Brazilian conferences and magazines, including *Women Information Technology* (WIT), the main national event addressing gender issues in Computing.

The selected digital libraries index prominent conferences and journals in the field of Computer Science. The inclusion of sources from these libraries ensures that the selected studies have undergone a peer-review process, which is a standard criterion for mitigating bias and ensuring methodological rigor in secondary studies [Kitchenham et al., 2023]. The search scope covered publications from the period of January 2018 to October 2023.

The languages considered for the search were English and Portuguese. English was selected because it is adopted by most international conferences and journals related to the research topic. In addition, most publishers available on the CAPES Journal Portal (Portal de Periódicos da CAPES)⁵ use English as their standard language. Portuguese was selected as it is used in national conferences, such as the Brazilian Symposium on Human Factors in Computer Systems (IHC) and WIT, where the research topic can be addressed.

¹<https://www.scopus.com/> (Accessed on 07 March 2026)

²<https://dl.acm.org/> (Accessed on 07 March 2026)

³<https://ieeexplore.ieee.org/> (Accessed on 07 March 2026)

⁴<https://sol.sbc.org.br/> (Accessed on 07 March 2026)

⁵<https://www.periodicos.capes.gov.br/> (Accessed on 07 March 2026)

4.1.1.3 Definition of PICOC and Search Terms

The first step in defining the search terms was to determine the PICOC parameters (Population, Intervention, Comparison, Results, and Context), proposed by authors Petticrew and Roberts [2006]. This structure allows the scope of the study to present the research questions in a clearer and more systematic way.

- (P) Population: Papers published in conferences or journals reporting the existence of guidelines related to interaction design in the context of women in technology.
- (I) Intervention: Use of interaction and user interface design guidelines based on a Feminist HCI perspective.
- (C) Comparison: As this is a systematic mapping, this parameter does not apply.
- (O) Results: Effectiveness of Feminist HCI guidelines in creating more inclusive, equitable, and gender-sensitive interfaces.
- (C) Context: Feminist HCI.

The second step was determining the terms that characterized the intervention, the population, and the outcome, as described in Table 2.

The search string was constructed and applied in both English and Portuguese to maximize coverage. While the English search employed a comprehensive structure, the Portuguese strategy was intentionally simplified and adapted to ensure greater precision in national databases, where the core concepts are indexed more consistently. This adaptation was a necessary methodological decision to avoid introducing noise and to maximize efficiency.

English search string: (*standards OR guidelines*) AND (*feminism OR feminist OR women OR gender*) AND (“*Human-Computer Interaction*” OR “*User Interface*” OR “*Interaction Design*” OR “*User Experience*” OR “*HCI*”).

Portuguese search string: (*Feminismo OR Feminista OR Mulheres OR Gênero*) AND (IHC).

4.1.1.4 Article Selection Criteria

In systematic mapping, only publications related to the research question should be selected for further analysis. To ensure transparency and consistency, any uncertainties regarding the application of the selection criteria were resolved through consensus meetings among the researchers, based on the review of titles, abstracts, and, when necessary, full texts. To this end, the following inclusion and exclusion criteria were defined for the articles returned by the search *string*:

• Inclusion Criteria:

[Inc1] Include articles that address interaction and user interface design from the perspective of Feminist HCI, or that investigate aspects of gender equity, gender bias, and inclusivity within software interfaces.

[Inc2] Include original research articles, systematic reviews, and case studies.

[Inc3] Include articles published between January 1, 2018, and October 30, 2023. This filter was adopted to ensure consistency in the mapping results with the current version of the guide. However, we recognize that this decision may reduce the breadth of the results, and

Table 2. Terms used in the search string.

	Intervention	Population	Results
Language	Use of guidelines	Feminist HCI	Guidelines Effectiveness
English	“Standards” OR “Guidelines”	“Feminism” OR “Feminist” OR “Women” OR “Gender”	“Interaction Design” OR “User Experience” OR “Human-Computer Interaction” OR “User Interface” OR “HCI”
Portuguese		“Feminismo” OR “Feminista” OR “Mulheres” OR “Gênero”	“IHC”

therefore this limitation will be mentioned and suggested as future work.

- **Exclusion Criteria:**

[Exc1] Exclude articles that do not meet the inclusion criteria.

[Exc2] Exclude articles where the full text is unavailable among the selected sources.

[Exc3] Exclude articles written in languages other than Portuguese or English.

[Exc4] Exclude duplicate articles or multiple versions of the same study. In such cases, the version containing the most complete information should be retained to avoid data redundancy.

4.1.2 Search and Selection Procedures

Three stages were defined to systematize the article selection process: (1) Identification, (2) Screening, and (3) Data extraction. Stage (1) consisted of searching previously established sources. Stage (2) comprised the first and second filters for selecting publications. Step (3) involved extracting information from the selected publications to answer the research questions, based on the concepts of the PRISMA protocol (*Preferred Reporting Items for Systematic Reviews and Meta-Analyses*) [Kitchenham et al., 2023]. Figure 1 presents an overview of the systematic mapping stages.

The SLM was conducted by a group of four researchers, undergraduate students in Computer Science and Software Engineering, with knowledge of SLM and Feminist HCI, under the guidance of two researchers with extensive experience conducting SLR. The mapping was divided to allow for an equitable distribution of activities and guarantee the quality and consistency of the results.

4.1.2.1 Identification

As this work extends a preliminary study previously published de Oliveira Freires et al. [2024], the data collection and initial screening phases described below were conducted by the research team of that study. This team consisted of six researchers: *Maria Isabele de O. Freires*, *Kellen Raizy Noronha Monteiro*, *Geslâne Rodrigues de Sena*, *Joana Ranikelly de Araújo Silva*, *Valéria Maria da Silva Pinheiro*, and *Anna Beatriz Marques*. A systematic search was conducted in several databases selected while developing the research systematic review protocol, such as IEEE Xplore, ACM Digital Library, Scopus, and SBC-OpenLib. Along with the choice of databases, search terms related to the interrelationship between HCI, feminism, and software systems were also added, “Guidelines”, “Human-Computer Interface”, “HCI”, “Interaction Design”, “User Experience”, “Feminism”, “Feminist”.

Based on the search string and the databases defined, the review used the Parsifal⁶ software as a support tool. This system allows studies identified during the search to be imported, along with other information such as the libraries selected for the search. In addition, within the system, the user can include the criteria for inclusion and exclusion of studies, perform data extraction, synthesize the results, and access the number of accepted, rejected, and duplicate studies. In total, 130 articles were found in the databases, five of which were duplicates. The search process and initial article selection were completed in October, 2023.

4.1.2.2 Screening, first filter

After identifying the articles in the databases using the search string, the 1st filter was carried out. At this stage, only the titles and abstracts of the articles were analyzed, selecting only research related to the topic. Articles that did not address the interconnection between HCI, feminism, user experience, and software technologies were excluded, as well as duplicate articles.

To carry out the first filter, the 125 non-duplicated articles returned were distributed among four of the researchers: *Maria Isabele*, *Kellen*, *Geslâne*, and *Joana*. Three researchers were assigned 31 articles each, and one researcher was assigned 32 articles.

To ensure greater reliability, *Anna Beatriz Marques*, an experienced researcher, independently assessed five articles analyzed by each of the four researchers, totaling 20 articles reviewed for compliance. Only one case involved a disagreement between the analyses. After resolving the disagreement through discussion, the process continued.

4.1.2.3 Screening, second filter

In the 2nd filter, 36 articles were evaluated. Following the established rigor, the articles were distributed among the same researchers: *Maria Isabele*, *Kellen*, *Geslâne*, and *Joana*. Each researcher was responsible for analyzing nine articles independently. At this stage, the articles were analyzed in greater depth, with a complete reading of the papers to confirm eligibility. The exclusion criterion was the same as for the first filter: articles without connection with the theme involving HCI, Feminism, and software technologies. To ensure consistency in this final selection, doubts regarding inclusion were resolved through consensus meetings involving the research team. In addition, additional searches were carried out to ensure the process was comprehensive and included research from different places.

⁶<https://parsif.al/> (Accessed on 07 March 2026)

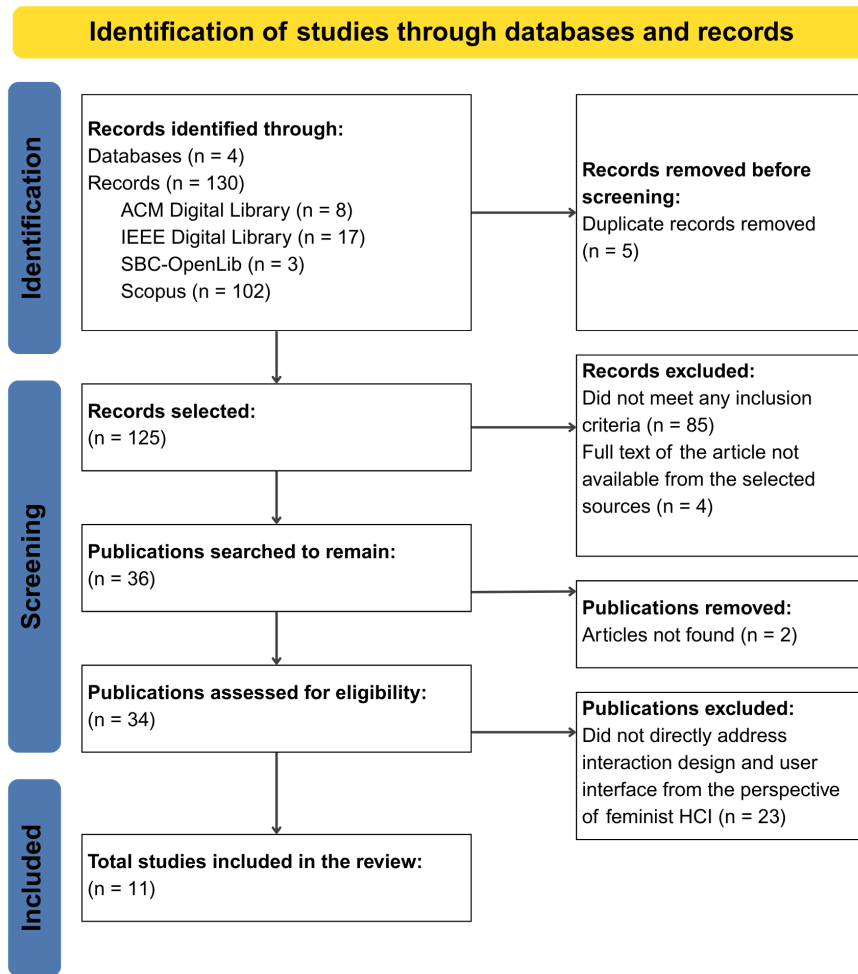


Figure 1. Stages of systematic mapping, based on PRISMA concepts [Kitchenham *et al.*, 2023].

4.1.2.4 Data Extraction

After completing the analysis of the second filter, a total of 11 articles were selected for the data extraction stage. These selected articles serve as the theoretical and empirical foundation for synthesizing the final guidelines presented in this work, rather than being ready-made guidelines themselves. The data extraction was distributed among five researchers from the team. The division of labor was as follows: the experienced researcher, *Anna Beatriz Marques*, was responsible for one article; two researchers (*Maria Isabele* and *Kellen*) were responsible for three articles each; and the remaining two researchers (*Geslâne* and *Joana*) were responsible for two articles each.

To extract data as objectively as possible, an extraction form was set up to record the necessary information for each article, reducing the possibility of bias on the part of the extraction team. The extraction form must allow all the necessary information to be recorded to answer the research questions [Kitchenham *et al.*, 2023]. In this sense, the extraction form for this SLM was defined according to Table 3.

Following the data extraction, a rigorous quality control process was implemented. A cross-validation of the extracted data was performed by the research team to ensure data consistency and accuracy, with each of the six researchers participating in the review of a portion of the material independently.

Any discrepancies found in the extracted fields were discussed and resolved through a consensus meeting involving all six researchers of the team before advancing to the data synthesis stage.

For the purposes of verifiability and reproducibility, the raw data extraction sheets are publicly available in the GitHub repository, and the electronic access address can be found in Section 9.

4.1.3 Data Analysis and Synthesis

In this final phase of the SLM, the extracted data were analyzed and synthesized with the objective of answering the defined research questions. The data were processed through descriptive characterization and interpretative synthesis. The analysis was conducted in three steps:

- **Characterization of the studies:** The main characteristics of the selected studies were identified based on the previously defined extraction form and complemented by other relevant information observed in the articles, such as publication venue, type of result, application context, and Feminist HCI quality criteria addressed.
- **Interpretative extraction:** As no study presented explicitly formulated guidelines, an in-depth reading of the full texts was conducted to identify, infer, and formulate guidelines based on the practices and reported results.

- **Organization of findings by research question:** After the analysis, the results were organized according to each research question, allowing the separate presentation of findings related to the guidelines, the application contexts, and the benefits and challenges identified.

Table 3. Data Extraction Form.

Researcher's name:
Article code:
Title:
Publication vehicle:
Authors and Affiliations:
Year of Publication:
Concepts of Feminist HCI:
Design Guidelines:
a) Whether or not the guidelines have already been used.
b) Which guidelines were used.
c) What environment they are used in.
d) How they were defined: based on theory or practice.
e) Context in which they apply: WEB, specific type or generic.
Tool Support (Yes/No):
a) If already used: characterize the usage environment.
b) If already evaluated: objective, methodology, number of evaluation participants.
Feminist HCI quality criteria applicable:
a) Pluralism.
b) Participation.
c) Activism.
d) Ecology.
e) Embodiment.
f) Positioning.
Stage of User-Centered Design to which the guidelines apply:
a) Identify requirements.
b) Create alternative solutions.
c) Build testable prototypes.
d) Evaluate with users.

4.2 Creation of the guide

The creation of the guide was organized into five stages: (1) extraction of the guidelines; (2) Guideline planning; (3) Refining the guidelines; (4) categorization of the guidelines; and (5) Guide Review. These steps are described concisely in the following subsections.

4.2.1 Extraction of the guidelines

In this stage, the guidelines were extracted from the publications selected through the SLM, resulting in 15 interface design guidelines focusing on Feminist HCI. Each guideline was organized and documented in Table 5, which is detailed in Section 5, Subsection 5.1. The table includes a unique identifier, the guideline's name, and the associated study.

4.2.2 Guideline planning

The planning phase involved two main processes: defining the guide's topics and choosing the tool to organize and structure it.

4.2.2.1 Defining the Guide's Topics

To meet the guide's objective, the defined topics present the information essential for understanding the guide's creation process, its purpose, and the procedures necessary for applying the presented guidelines. The topics defined are as follows:

- **What is the Guide?:** Explanation of the guide's purpose, highlighting its role in presenting interaction and user interface design guidelines from a Feminist HCI perspective.
- **How was the Guide created?:** Informs about the systematic review and the results found.
- **Principles of Feminist HCI:** This topic presents the objective of Feminist HCI and its six principles, providing the theoretical and conceptual framework for the application of the guidelines. Each principle includes its definition and a practical example.
- **Guidelines:** Finally, the guidelines are presented with their definition, form of implementation, benefit, and challenge in application, as well as a relevant reference in the real context.

4.2.2.2 Tool to be Used for Organizing and Structuring the Guide

In selecting the tool for the development of the guide, the aim was to ensure ease of sharing for readers, as well as adequate support for editing and collaboration among the authors. After analyzing the available alternatives, the Genially⁷ platform was chosen, as it enables the creation of interactive multimedia content and provides essential functionalities for the visual organization and structured presentation of the guidelines.

4.2.3 Refining the guidelines

After extracting the fifteen guidelines, the research team conducted a secondary literature review to better contextualize and illustrate each guideline. The secondary research protocol was conducted in two ways. First, an exploratory search was conducted using the ChatGPT⁸ to request suggestions for sources with examples, especially for those guidelines with initial searches that returned few results. Next, the suggestions generated by the tool were subjected to critical analysis and manually verified through additional in-depth research on websites and databases in order to identify references that exemplified or reinforced the guidelines. Only references that met these criteria were included in the guide.

4.2.4 Categorization of the guideline

After identifying and detailing the guidelines, as presented above, they were adapted and organized based on the six interaction design quality criteria proposed by Bardzell [2010]: (1) Pluralism; (2) Participation; (3) Activism; (4) Ecology; (5) Incorporation; and (6) Positioning. This classification aims to

⁷<https://genially.com/> (Accessed on 07 March 2026)

⁸<https://chat.openai.com> (Accessed on 07 March 2026)

facilitate the use of the guidelines, improving the understanding and organization of the guide, in the process of a more inclusive design.

4.2.5 Guide Review

The guide was produced, and the guidelines were categorized by *Geslâne Rodrigues de Sena* and *Kellen Raizy Noronha Monteiro*, followed by a review by *Valéria Maria da Silva Pinheiro* and *Anna Beatriz Marques*, who are senior researchers. After the revision process, the guide is available for viewing by professionals in the field.

4.3 Design and application of the TAM model

To validate the usefulness and ease of the proposed guide, a form was drawn up using the Google Form tool⁹, adopting the TAM model with adaptations for the research context. The TAM was developed to predict the adoption of new Information Technologies (IT). It states that an individual's intention to use is determined by two beliefs: perceived usefulness and ease of use [Venkatesh and Bala, 2008]. The form was divided into three blocks:

- **Block 1 - Informed Consent Form:** information that the data collected will be treated confidentially and used only for academic purposes, as well as assuring that participation is voluntary, with the right to withdraw at any time.
- **Block 2 - Respondent Profile:** information about the participant's area of expertise, whether they have had contact with Feminist HCI concepts and their level of experience in software projects.
- **Block 3 - Acceptability of the Guide:** six questions were prepared in this block, four of which were Likert scale statements and the other two were subjective. The first four questions dealt with the presentation and content of the guide, the perception of the guide's usefulness, the perception of the guide's ease of use, and the perception of the guide's behavioral intention. The two open-ended questions asked whether respondents would use the guide in developing future applications and suggestions for improving the guide.

The complete questionnaire is available for verification and reproducibility in Section 9 of this article.

The form was also reviewed by *Anna Beatriz Marques* and *Valéria Maria da Silva Pinheiro*. It was then made available online, and the responses were collected anonymously, following the consent form. Since this is a preliminary evaluation, the researchers used a convenience sample and circulated the form to colleagues working on software projects. Thirteen participants took part. Finally, the data collected were analyzed and discussed later in the results section.

4.4 Ethical and Moral Aspects

Conducting research involving human subjects, in accordance with national guidelines (CNS Resolutions 510/2016 and 466/2012), requires prior submission and approval by the Research Ethics Committee (CEP). We recognize that the involvement of people would require this approval, since the

sample was not restricted to expert judges with more than 5 years of experience. However, this evaluation was carried out with a view to extending the work, and the limited time available made it impossible to submit it to the institution's CEP for approval. To ensure the integrity and rights of participants, all appropriate ethical measures were adopted: (i) The form includes the Free and Informed Consent Form and the voluntary nature of participation; (ii) Data collection was carried out ensuring total anonymity and confidentiality. To reinforce our ethical commitment, we mention that the research team has prior approval from the CEP in other projects that also use the TAM model for technology assessment, ensuring rigor in the conduct of the research.

5 Systematic Mapping Results

The SLM identified 130 articles in the related searches in the databases based on the defined *string*. Of this total, 4% were duplicates, corresponding to 5 articles; 88% were rejected, corresponding to 114 articles; and 8% were accepted for analysis and data extraction, corresponding to 11 articles.

The excluded articles met the following criteria: 85 articles did not meet the inclusion criteria (75%), six articles did not have the full version found (5%) and 23 articles did not deal directly with interaction and interface design from a Feminist HCI perspective (20%).

Table 4 shows the articles selected, their publication vehicle, the type of result found, context, and the related quality criteria, with their respective acronyms defined at the bottom of the table.

The 11 accepted articles were analyzed, revealing the main contributions and results in the form of guidelines, theoretical or experimental studies on Feminist HCI, and guidelines for designers. Five of these articles deal specifically with feminist HCI guidelines, which is the main focus of this SLM. Regarding the context in which the studies focus, the articles can be characterized as follows: five do not define a specific context, two are directed at web applications, one is directed at robot development, one refers to embedded interactions with emerging technologies, and the rest are about interface design and user interaction. In addition, the studies analyzed are predominantly concentrated in international publications.

Regarding the quality criteria of Feminist HCI, the ecology criterion (EC) was the least addressed by the articles, appearing in three articles. The most frequently observed quality criterion was pluralism (PL), which was found in nine articles. One possible hypothesis for the difference in using these quality criteria is that EC depends on the association of specific product values with the female public. PL works with diversity, seeking to deconstruct interface design solutions that marginalize minority groups, so it becomes a relevant criterion in contexts of inclusion and representativeness of these groups. To better understand how the articles address Feminist HCI, they will be briefly described with a focus on the Feminist HCI quality criteria they address.

Tannenbaum *et al.* [2019] consider pluralism as a Feminist HCI quality criterion, as it suggests the importance of considering diverse experiences and perspectives about gender and sex in developing technologies and science.

Tlachac *et al.* [2022] consider pluralism, participation

⁹<https://docs.google.com/forms/> (Accessed on 07 March 2026)

Table 4. Summary of selected studies.

Study	Publication vehicle	Type of result	Context	Quality criteria					
				PL	PA	AT	EC	EM	PO
[Tannenbaum et al., 2019]	Nature	Guidelines	General	x					
[Tlachac et al., 2022]	Healthcare Analytics	Guidelines	Web	x	x	x			
[Winkle et al., 2023]	ACM/IEEE International Conference on Human-Robot Interaction (HRI '23)	Guidelines	Robot Development	x	x	x	x	x	x
[Strengers et al., 2021]	CHI'21	Guidelines	Embodied interactions with emerging technologies		x	x			
[Amaral et al., 2023]	CAPAIhc	Guidelines	General	x	x		x	x	
[Dahri et al., 2023]	Frontiers in Health Informatics	Design and evaluation and empirical study	Web					x	
[Baharum et al., 2019]	Indonesian Journal of Electrical Engineering and Computer Science	Empirical study	User interface design	x		x		x	
[Motahar and Ahmed, 2022]	ACM (HRI '22)	Instructions for designers	Interaction design	x	x	x			x
[Chiarelli and Cacciaguerra, 2023]	IOS Press	Theoretical study	General	x	x	x	x	x	x
[Córdova et al., 2023]	Women In Information Technology (WIT)	Theoretical study	General	x	x				x
[de Jesus et al., 2023]	CAPAIhc	Theoretical study	General	x	x	x			

Quality Criteria Acronyms: PL = Pluralism; PA = Participation; AT = Activism; EC = Ecology; EM = Embodiment; PO = Positioning.

and activism, as they highlight the importance of considering cultural diversity when creating screening interfaces, as well as testing and evaluating these technologies with a diverse sample of users, and emphasize the need to design solutions that avoid perpetuating gender stereotypes.

Winkle et al. [2023] consider all the quality criteria of Feminist HCI, as they emphasize the synthesis of multiple perspectives to understand the reality of different groups, encompass participatory practices in the stages of a robot's life cycle, ranging from the active stance of the research team to the bodily and gender dimensions that affect users' experiences with robots.

Strengers et al. [2021] consider participation and activism, as they involve and promote the voices of marginalized groups with a focus on advocating for change, empowerment and social justice.

Amaral et al. [2023] consider pluralism, participation, ecology and embodiment by recognizing differences in the human experience, involving users in the design process and focusing on broader social structures than the technologies themselves.

Dahri et al. [2023] consider embodiment, as they evaluate the usability of a virtual nutritional counseling app for pregnant women to understand design for these users.

Baharum et al. [2019] consider pluralism, activism and embodiment as they evaluate the gender-based mobile shopping process by addressing diversity and using gender-distinct mental model patterns to create user interfaces.

Motahar and Ahmed [2022] consider pluralism, participation, activism and positioning, as they design technologies that meet the specific needs of the demographic group in the form of making it more inclusive and accessible for marginalized groups to participate in activities with technological resources.

Chiarelli and Cacciaguerra [2023] also consider all the quality criteria of Feminist HCI, as they aim to create products, services and environments that all people can use, promote the possibility for those involved to give feedback on their needs and problems, actively involve users throughout the design process and emphasize understanding users' needs in terms of their individualized differences.

Córdova et al. [2023] consider pluralism, participation and positioning, as they recognize that there are diverse perspectives that must be taken into account when developing technological solutions, involve users and stakeholders in the design process to create solutions that meet their needs and preferences, and explore the relationship between gender and technology by considering how technology impacts women and other marginalized groups.

de Jesus et al. [2023] consider pluralism, participation and activism as they foster greater inclusion of women in technology environments, highlighting the importance of a more participatory and inclusive approach in general in the field.

5.1 What guidelines exist for interaction and user interface design from a Feminist HCI perspective?

The literature review aimed to identify interaction and user interface design guidelines explicitly formulated from a Feminist HCI perspective. Five selected articles mentioned principles or recommendations that could be applied to design, however none of them presented a formal and dedicated set of objectively defined guidelines for this purpose.

Given this gap and recognizing the potential value of implicit recommendations for the design community, the research team conducted a detailed interpretive analysis of the works. Table 5 lists the 15 interpretively extracted guidelines from the five studies, trying to trace and categorize the principles and practices suggested by the authors. This approach, while incorporating a degree of subjectivity inherent in the analysis, aims to maximize the utility of the SLM findings. Next, we detail the extraction process for each guideline based on the respective studies.

The roadmap proposed by Tannenbaum et al. [2019] for analyzing sex and gender in science and engineering projects served as the basis for extracting guidelines ID01 to ID05. Guidelines ID01 to ID03 were extracted directly from the mention of a roadmap for the collection and analysis of gender-sensitive data, techniques for assessing and mitigating gender bias in AI algorithms and systems, and the need to adopt in-

Table 5. Guidelines found in the SLM.

Identifier	Guidelines	Studies
ID01	Collect and analyze gender-sensitive data.	[Tannenbaum <i>et al.</i> , 2019]
ID02	Evaluate and mitigate gender bias.	[Tannenbaum <i>et al.</i> , 2019]
ID03	Adopt inclusive design strategies.	[Tannenbaum <i>et al.</i> , 2019]
ID04	Consider the ethical implications of gender-focused design.	[Tannenbaum <i>et al.</i> , 2019]
ID05	Be committed to creating technologies that promote gender equality.	[Tannenbaum <i>et al.</i> , 2019]
ID06	Ensure that the information presented does not reinforce negative or harmful gender stereotypes and that screening technologies are inclusive.	[Tlachac <i>et al.</i> , 2022]
ID07	Taking cultural diversity into account when developing screening interfaces.	[Tlachac <i>et al.</i> , 2022]
ID08	Conduct usability tests with a diverse sample of users.	[Tlachac <i>et al.</i> , 2022]
ID09	Design interfaces that minimize the impact of gender stereotypes on screening scores.	[Tlachac <i>et al.</i> , 2022]
ID10	Analyze how power operates in the world, to consider the impact of deployment on the broadest context and the widest possible range of stakeholders.	[Winkle <i>et al.</i> , 2023]
ID11	Challenging unequal power structures and working for justice, avoiding the spread of harmful stereotypes, as well as the imposition of designers' own values on users and stakeholders.	[Winkle <i>et al.</i> , 2023]
ID12	Apply "FRIES" model of sexual consent (<i>Free (F), Reversible (R), Informed (I), Excited (E) and Specific (S)</i>).	[Strengers <i>et al.</i> , 2021]
ID13	Apply the "TEASE" model (traffic lights (T), establish continuous dialog (E), aftercare (A), safety words (S), and explain soft/hard limits (E)) created by the authors.	[Strengers <i>et al.</i> , 2021]
ID14	Include as guidelines: pluralism, participation, defense, ecology, embodiment, and self-disclosure / self-dissemination.	[Amaral <i>et al.</i> , 2023]
ID15	Revitalize with the inclusion of values such as politicization, horizontality, situated knowledge, and people's activism.	[Amaral <i>et al.</i> , 2023]

clusive design strategies that recognize and respect gender identity diversity. Guidelines ID04 and ID05 are derived from the authors' emphasis on social responsibility and improving accuracy in Science and Engineering, which implies considering the ethical implications and commitment to gender equality in technological development.

The experiment conducted by Tlachac *et al.* [2022], which assessed whether a reminder of gender disparity in depression affects screening results, supported the extraction of the ID06 to ID09 guidelines. The focus on minimizing the impact of gender stereotypes on the final score led to the extraction in guidelines ID06 and ID09 that the conclusion that the information displayed altered the outcome for women and non-binary participants suggests the guideline to ensure that the information presented does not reinforce harmful stereotypes and to design interfaces that minimize the impact of stereotypes. Guidelines ID07 and ID08, although not explicitly formulated as guidelines, the conduct of the experiment with a diverse sample and the nature of the topic suggest the best practices of taking cultural diversity into account and conducting usability tests with a diverse sample.

The practical experience of Human-Robot Interaction

(HRI) through the lens of feminist principles by Winkle *et al.* [2023] served as the basis for extracting guidelines ID10 and ID11, which focus on the social and political dimension. ID10 (Analysis of Power and Ecology) is extracted from the application of the feminist principle of HCI as ecology, which requires that the impact of system deployment on the broader context and social relations be considered. ID11 (Challenging Power Structures) derives from the emphasis on identifying reflective issues that should challenge unequal power structures, avoid the spread of harmful stereotypes, and the imposition of designers' own values on users.

The conceptual and theoretical analysis of the "FRIES" model of sexual consent and the development of a "TEASE" process guide by Strengers *et al.* [2021] led to the extraction of guidelines ID12 and ID13, which are specific interaction models. ID12 is the direct application of the "FRIES" model (*Free (F), Reversible (R), Informed (I), Excited (E) and Specific (S)*), which serves as a design checklist for interactions requiring consent. ID13 is the direct application of the "TEASE" process guide (traffic lights (T), establish continuous dialog (E), aftercare (A), safe words (S) and explain soft/hard limits (E)), developed by the authors to safely structure complex interac-

tions.

The proposal to revitalize the quality criteria of Feminist HCI by Bardzell [2010] to encompass intersectionalities, made by Amaral *et al.* [2023], allowed the extraction of guidelines ID14 and ID15, which are values and principles of revitalization. ID14 was extracted directly from the mention of principles such as pluralism, participation, advocacy, ecology, incorporation, and self-promotion/self-dissemination. ID15 derives from the new concepts proposed for Feminist HCI, including values such as politicization, horizontality, situated knowledge, and popular activism, which should guide design to promote greater social reach.

5.2 In which contexts have the guidelines for interaction and user interface design from a Feminist HCI perspective been adopted?

Interaction and user interface design guidelines from a Feminist HCI perspective have predominantly been applied in web application development contexts. Most studies and projects have focused on creating and evaluating interfaces for online platforms, highlighting the trend towards integrating inclusive design practices into digital environments.

Tannenbaum *et al.* [2019] do not specifically mention for which contexts the guidelines were suggested; however, they provide examples of application in designing products that meet the needs of elderly women and in creating social robots that avoid gender stereotypes.

Winkle *et al.* [2023] highlighted that the guidelines can be applicable in various human-robot interaction situations, such as therapy, health care, and domestic environments. It also suggests a continuous development approach with the necessary precautions to avoid perpetuating inequalities and stereotypes.

Strengers *et al.* [2021] applied their research in three areas of body interaction: (1) body game interactions; (2) persuasive interactions with innovative technologies; and (3) intimate interactions with anthropomorphized devices, such as virtual assistants and sex robots. In addition, the process guide called “TEASE” could be applied to various emerging bodily interactions to enhance consensual practice in HCI.

Dahri *et al.* [2023] focus on evaluating the usability of a virtual application for nutritional advice for pregnant women, using the heuristic evaluation method. A health and nutrition web application was developed for pregnant women to be more accessible and to ensure satisfaction from data collection and analysis specific to this group. However, the adoption of specific guidelines in this context was not mentioned.

Baharum *et al.* [2019] evaluated the different gender perspectives in the mobile shopping app using eye-tracking technology. There was the application of user interface design for mobile shopping web applications based on mental model patterns, and also, no specific design guidelines were adopted, targeting the Feminist HCI perspective. Some differences were identified in the preferred positioning of functionalities in the interface, such as the male preference for having the product category at the top of the interface, like the one developed for the female gender. At the same time, women prefer to have it on the left, as in the user interface design created for the male gender. Overall, both genders have similar

preferences and sometimes choose the location of interface elements designed for the opposite gender.

The study of Córdova *et al.* [2023] had application in the educational context, being the main area in which the relationship between gender, gamification, and Feminist HCI has been explored. In addition, the results revealed no consistent pattern of gender incorporation in gamified solutions.

Tlachac *et al.* [2022], Motahar and Ahmed [2022], and de Jesus *et al.* [2023] do not mention the contexts, but that interaction and interface design can be present in different applications such as: healthcare, education, product design, and interactive services. Amaral *et al.* [2023] do not mention context, but present a proposed agenda for intersectionality in HCI in Brazil.

5.3 What are the benefits and challenges of adopting the guidelines for interaction and user interface design from a Feminist HCI perspective?

The Table 6 presents the benefits and challenges identified in studies on the adoption of feminist HCI guidelines.

As benefits, the studies report that the guidelines provide better performance, greater inclusion and better accessibility [Tannenbaum *et al.*, 2019; Tlachac *et al.*, 2022], as well as leading to the development of products and technologies that meet the needs of underrepresented groups, including women, people who are not white, people with disabilities, among others. The use of the guidelines has benefits for promoting inclusion and diversity in technology [Tannenbaum *et al.*, 2019; Tlachac *et al.*, 2022; Winkle *et al.*, 2023], contributing to social and gender equity; improving the user experience [Strengers *et al.*, 2021] and the usability of technological products [Winkle *et al.*, 2023], reducing and preventing gender-based violence and discrimination [Amaral *et al.*, 2023]. Guidelines can help improve consensual practice in HCI, including protecting users’ privacy, trust, and autonomy [Strengers *et al.*, 2021], giving users more control over their interactions with technologies and other users.

The lack of consensus on what exactly constitutes a Feminist HCI perspective is one of the challenges [Tannenbaum *et al.*, 2019; Tlachac *et al.*, 2022] and another potential conflict is between the needs of some users and the needs of others [Winkle *et al.*, 2023; Strengers *et al.*, 2021], with the possibility of perpetuating gender stereotypes. Although the benefits outweigh the challenges, there is a need to deepen and disseminate knowledge about feminist perspectives [Amaral *et al.*, 2023], limited resources for research and development of inclusive and equitable technologies [Tlachac *et al.*, 2022; Amaral *et al.*, 2023], resistance and lack of interest from some companies and organizations in adopting the guidelines, and the challenge of creating inclusive design guidelines [Winkle *et al.*, 2023]. It is difficult to reconcile ethical commitments with commercial objectives and technological development [Winkle *et al.*, 2023]. It is necessary to promote critical and citizen education in HCI [Amaral *et al.*, 2023] so that everyone can design and consider the different possibilities of participation, taking horizontality and intersectionality into account.

Table 6. Benefits and challenges of adopting the guidelines.

Benefits		Challenges	
Description	References	Description	References
More inclusion and better accessibility.	[Tannenbaum et al., 2019]	Lack of consensus and difficulties in adopting feminist perspectives.	[Tannenbaum et al., 2019], [Tlachac et al., 2022]
Diversity in technology and/or development of products and technologies that meet the needs of under-represented groups, improving usability.	[Tlachac et al., 2022], [Tannenbaum et al., 2019]	Conflicts and limitations in implementing inclusive approaches.	[Tannenbaum et al., 2019], [Winkle et al., 2023], [Strengers et al., 2021]
Promoting gender equality, preventing the perpetuation of stereotypes and inequalities.	[Tlachac et al., 2022], [Winkle et al., 2023]	Limited resources for development and research into inclusive technologies, and education from feminist and HCI perspectives.	[Tlachac et al., 2022], [Amaral et al., 2023]
Improving user experience and usability.	[Winkle et al., 2023], [Strengers et al., 2021]	Complexity in the design phases and difficulty in reconciling ethical commitments with commercial objectives and technological development.	[Winkle et al., 2023]
Inclusion of groups in design and technology creation processes and reinforcement of social commitments.	[Amaral et al., 2023]		
Empowering users to make their own decisions and take control of interactions.	[Strengers et al., 2021]		

6 Proposed Guide and Preliminary Results

This section presents the main results related to the development of the guide and the initial evaluation carried out. First, the guide will be detailed in terms of its structure, content, and guidelines. Then, the preliminary results of its validation with the readers of the material will be described.

6.1 Description of the proposed guide

The proposed guide, entitled Guidelines for Interface Design with a Focus on Feminist HCI¹⁰, consists of a proposed resource for interaction and user interface design to support professionals seeking to create systems with more inclusive interfaces. Available in digital format and with online access, the material comprises sections that address essential aspects to provide an in-depth understanding of its content, including an understanding of the guidelines. Figures 2 to 5 illustrate the navigation flow used to access the guidelines and select one to view its details. The sequence includes the home screen in Figure 2 and the purpose of the guide in Figure 3, while Figure 4 presents the list of guidelines and Figure 5 shows detailed information about the selected guideline. It should be noted that the original guide was developed in Portuguese and the version for presentation in the article was translated

into English.

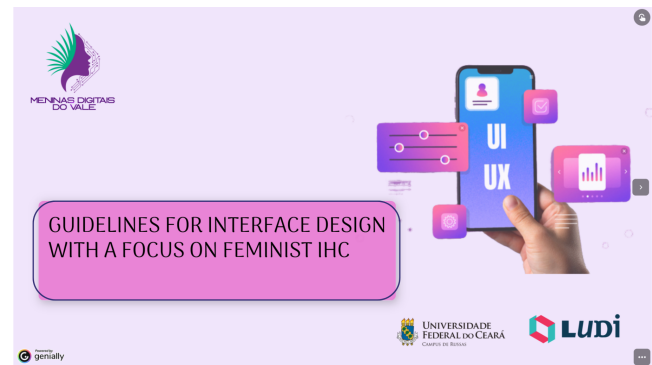


Figure 2. Home screen of the guide.

The content of the guide is divided into three main parts: the first briefly presents the role of the guide in exposing the guidelines, as well as the SLM steps taken to identify them; next, Feminist HCI and its six quality criteria are presented, explaining them to readers who may or may not be familiar with this approach; and lastly, the guidelines, which include their definition, the steps for their application, their benefit and challenge, along with references that reinforce or exemplify the guidelines, seeking to contribute to a more precise and more complete understanding.

In addition to the textual content, the guide has visual effects, such as highlighting interactive elements, promoting visual feedback, and reinforcing the perception of clickable

¹⁰<https://view.genially.com/680534921392242e19a94295/interactive-content-guidelines-for-interface-design-with-a-focus-on-feminist-ihc> (Accessed on 07 March 2026)

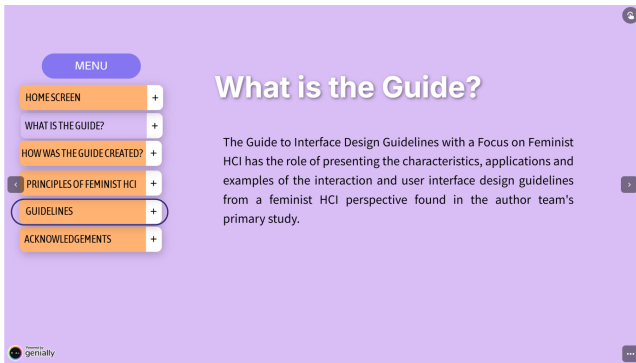


Figure 3. Screen detailing the guide's purpose and its role in presenting Feminist HCI guidelines.

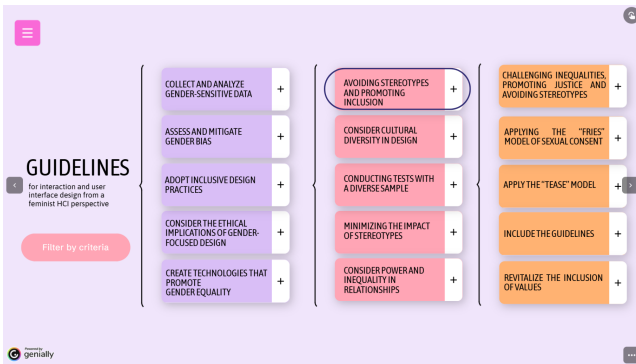


Figure 4. Screen displaying the list of guidelines.

items. These visual resources were used to make it easier to identify the sections and their information, as well as the navigation elements, improving clarity and promoting consistent navigation throughout the material.

The guide's core content consists of the 15 extracted guidelines. The details presented about each guideline are their initial information, identified in the SLM, and complemented by data from the additional research. Based on this content, the guidelines were categorized according to the quality criteria, as presented in Table 7, indicating the number quantity of guidelines assigned to each category.

To illustrate how the guidelines are presented in the guide, the following text details one of them, chosen for fitting into a greater number of categories: guideline ID14 proposes the inclusion of the guidelines imposed by Bardzell [2010], such as pluralism, participation, advocacy, ecology, embodiment, and self-disclosure. To apply it, it is necessary to incorporate diversity into design and development teams, involve active users in the process, and incorporate ethical and social concerns into design choices, consider the impact of projects in larger social contexts, emphasize the materiality of interactions, and encourage designers to be transparent about their placements and assumptions in design. The main benefit is the integration of diverse perspectives and experiences in interaction design, although it has challenges such as social or technological barriers that hinder the inclusion of certain groups. As an example of application, an app is mentioned that highlights gender-biased words in your document, designed to allow you to eliminate unconscious biases in your writing ¹¹. Based on this content and with the aim of evaluating the effectiveness of these processes, as well as

¹¹<https://marketplace.visualstudio.com/items?itemName=chrisalexander.genderdecoder> (Accessed on 07 March 2026)

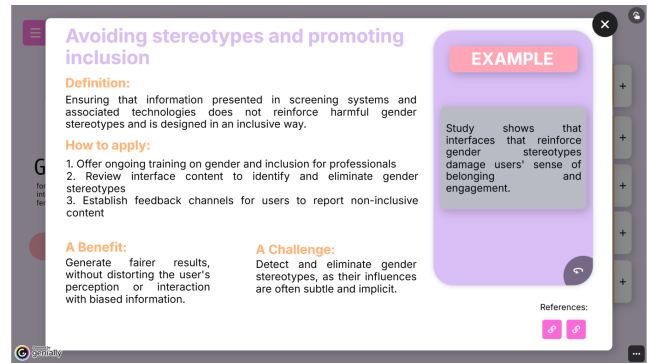


Figure 5. Detailed information screen for a specific guideline.

the acceptance of the guide, a preliminary assessment was conducted using the TAM model.

6.2 Results of the preliminary evaluation of the guide

This subsection presents the data collected from the evaluation applied to participants, with the aim of verifying whether the Guidelines for Interface Design with a Focus on Feminist HCI are easy to use, useful, and capable of contributing to design practices. Participants were recruited through an academic group on the WhatsApp¹² instant messaging social network, where the link to access the form was posted.

Therefore, the following sections will be divided into two subsections to better detail the results obtained: the respondent profile and the acceptability of the guide.

6.2.1 Respondent profile

With the data collected, we had 13 participants. All agreed to answer the form following the Informed Consent Form. Regarding the area of activity, 53.8% (corresponding to 7 participants) are from the UI/UX Design, 23.1% (corresponding to 3 participants) from development, and 7.7% (corresponding to 1 participant for each area) from the areas of testing, requirements and HCI research, as shown in Figure 6.

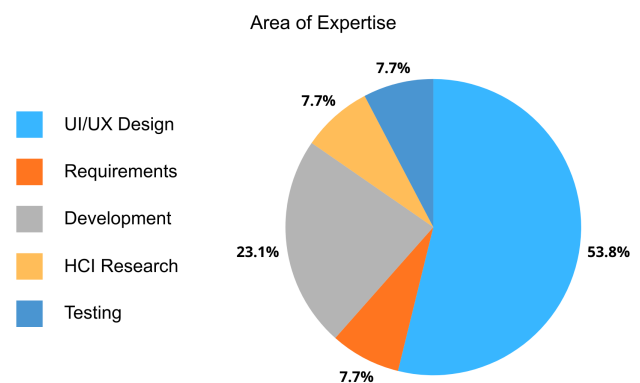


Figure 6. Percentage distribution of respondents according to Area of Expertise, based on the original question: "What is your area of expertise?"

Regarding previous contact with Feminist HCI concepts, 38.5% (corresponding to 5 participants) said they had never heard of it, 15.4% (corresponding to 2 participants) had heard of it but didn't know what it was about, 38.5% (corresponding to 5 participants) had a basic idea about it and 7.7% (corresponding to 1 participant) had read or studied about Fem-

¹²<https://www.whatsapp.com> (Accessed on 07 March 2026)

Table 7. Guidelines categorized according to quality criteria.

Criteria	Guidelines	Quantity
Pluralism	ID01, ID02, ID03, ID04, ID05, ID06, ID07, ID08, ID11, ID14, ID15	11
Participation	ID02, ID03, ID04, ID05, ID07, ID08, ID09, ID10, ID11, ID14, ID15	11
Activism	ID02, ID03, ID04, ID05, ID06, ID07, ID09, ID11, ID14, ID15	10
Ecology	ID14	1
Embodiment	ID03, ID06, ID08, ID12, ID13, ID14	6
Positioning	ID12, ID13, ID14	3

inist HCI. None of the participants said they had in-depth knowledge of the subject and/or had applied it in projects, as illustrated in Figure 7.

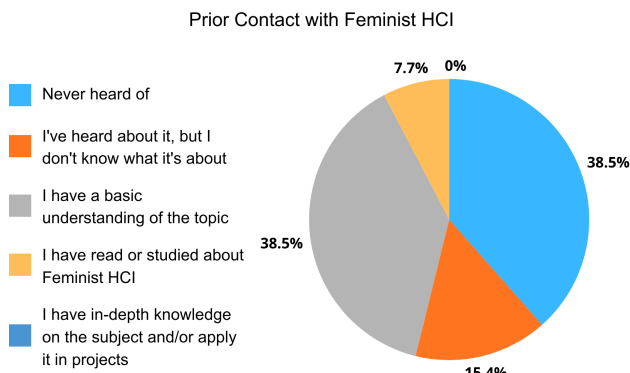


Figure 7. Percentage distribution of participants according to Prior Contact with Feminist HCI, based on the original question: “Before this evaluation, have you had any contact with the concepts of Feminist HCI?”.

Regarding the level of experience in software projects (considering academic, professional, freelance, internships, personal projects or volunteering), 7.7% (corresponding to 1 participant) answered that they are beginner students and are still starting in the area and have not yet participated in practical projects, 76.9% (corresponding to 10 participants) are beginners and have participated in some projects (such as freelance, academic, internships or volunteering), with up to 2 years of practice and 15.4% (corresponding to 2 participants) consider themselves to be at an intermediate level in that they have already worked on different projects and have between 2 and 5 years of experience in the area. On the other hand, there were no responses at the advanced level, where they have been working regularly on projects for more than 5 years. projects for more than 5 years and specialists/seniors who have more than 8 years’ experience, working strategically, leading teams or participating in advanced research, as illustrated in Figure 8.

6.2.2 Guide acceptance

The data collected in the acceptance section of the guide were organized according to the TAM model factors [Venkatesh and Bala, 2008]. For this research, the following constructs were considered:

- **Affect (AF)** — Refers to the feelings and affective responses of participants while using the guide.
- **Perception of Usefulness (PU)** — Indicates the degree to which the user believes that using the guide can improve their performance in the design process.

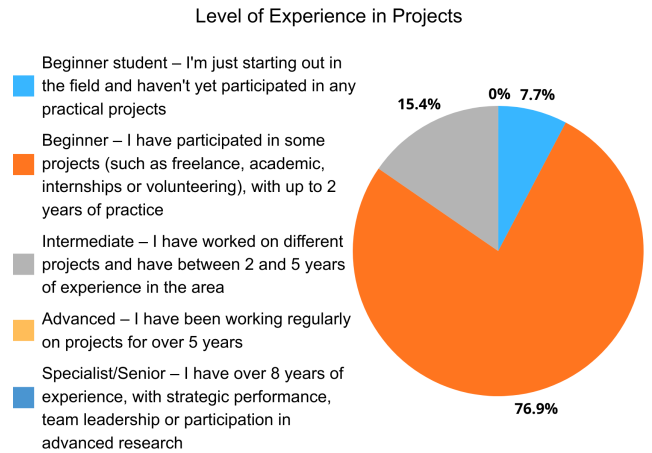


Figure 8. Percentage distribution of respondents according to Level of Experience in Projects, based on the original question: “What is your level of experience in software projects (considering academic, professional, freelance work, internships, personal or voluntary projects)?”.

- **Perception of Ease of Use (PEOU)** — Represents the degree to which the user perceives that using the guide does not require significant effort.
- **Behavioral Intention (BI)** — Refers to the user’s future intention to adopt the guide in their design practices.
- **Open Questions (OPN)** — Groups open-ended questions designed to capture participants’ personal perceptions and individual interpretations. Since the evaluation was conducted with Brazilian professionals, the discursive responses were originally provided in Portuguese and translated into english by the authors.

The topics evaluated in the form are presented below, organized according to each of these factors.

- **Guide presentation and content:**
 - [AF1] The Guide is easy to understand and uses accessible language.
 - [AF2] The guidelines are well organized and easy to locate.
 - [AF3] The format of the Guide makes it easy to apply to real projects.
 - [AF4] The Guide offers practical examples to help understand the concepts.
 - [AF5] The document’s interface (layout, visual structure) contributes to its usability.
- **Perception of the usefulness of the guide (from TAM model):**
 - [PU1] Using the guide to gender inclusive design would increase my performance in this activity.
 - [PU2] Using the guide for gender inclusive design would increase my productivity in this activity.

[PU3] Using the gender inclusive design guide would increase my effectiveness in this activity.

[PU4] I consider the guide useful for gender inclusive design.

• **Perception of the guide’s ease of use (from TAM model):**

[PEOU1] My interaction with the guide is clear and understandable.

[PEOU2] Interacting with the guide doesn’t require too much of my mental effort.

[PEOU3] I find the guide easy to use.

[PEOU4] I find getting the guide to do what I want easy.

• **Perception of the guide’s behavioral intention (from TAM model):**

[BI1] Assuming I had access to the guide, I intend to use it.

[BI2] Given that I have access to the guide, I see myself using it.

[BI3] I intend to use the guide in the coming months.

• **Open Questions:**

[OPN1] Would you use the guide in developing future applications to promote more inclusive design? Please justify your answer.

[OPN2] What would you suggest to improve the guide to make it more efficient and applicable?

Table 8 shows the number of responses to the statements obtained through the form in the Guide Acceptance section. We attributed values from 1 (Totally disagree) to 5 (Totally agree) on the Likert scale.

Table 8. Results of the Guide’s Acceptance statements.

Statements	1	2	3	4	5
Guide presentation and content					
AF1	0	0	0	5	8
AF2	0	0	0	2	11
AF3	0	0	2	5	6
AF4	0	0	1	6	6
AF5	0	0	0	3	10
Perception of the usefulness of the guide					
PU1	0	0	0	6	7
PU2	0	0	1	6	6
PU3	0	0	0	3	10
PU4	0	0	0	1	12
Perception of the guide’s ease of use					
PEOU1	0	0	1	5	7
PEOU2	0	0	1	4	8
PEOU3	0	0	0	7	6
PEOU4	0	0	1	4	8
Perception of the guide’s behavioral intention					
BI1	0	0	1	7	5
BI2	0	0	3	7	3
BI3	0	0	4	7	2

The statements about the presentation and content of the guide seek to understand whether it is easy to understand and whether the information is well organized. Most of the statements were concentrated in options 4 and 5, represented by “agree” and “totally agree,” respectively. However, there were few neutral responses and no disagreements, which reinforces

the evaluators’ positive acceptance of the guide.

The participants’ perception of the usefulness of the guide identifies the degree to which a person believes the material can improve their performance. Most of the responses were in agreement, and there was only one neutral response.

On the participants’ perception of the ease of use of the guide, in which the person believes that using the material will involve no effort. Most of the statements agreed, but there were three neutral responses for different variables.

The perception of the guide’s behavioral intention portrays statements about whether participants would use the guide in future projects. Despite many responses of agreement, there was also a considerable amount of neutrality.

In the open questions, referring to OPN1, all the participants responded positively that they would use the guide in future applications, as reported by P3 and P13.

P3 - *“Yes. Recognizing and respecting multiple layers of identity (Gender, Race, Class, Disability, etc.) is increasingly necessary in development.”* [our translation]

P13. - *“Yes, I would use the guide when developing future applications. I believe that having this more attentive and sensitive look helps not only to make products more accessible, but also more representative and welcoming for all people.”* [our translation]

In question OPN2, readers of the guide were asked for suggestions for improvements to make the material more efficient and applicable. The material was praised extensively, for example, in the reports by P3 and P13.

P3 - *“The guide is already very good, in line with what it proposes, clear and cohesive, having an example for each guideline made it much easier to understand the content.”* [our translation]

P13 - *“I think the guide is already perfectly complete, especially as it contains easy-to-visualize examples of each guideline explored.”* [our translation]

However, as mentioned in the reports by P2, P4, and P6, there are also suggestions for improving the material.

P2 - *“I don’t know if it would go beyond the guide’s purpose, but it would be interesting to see the guidelines applied in an interface or prototype.”* [our translation]

P4 - *“I think the guide is very objective and its references linked to the guidelines are a way of going deeper into each of them, the only thing I miss is more example interfaces, with the structures guided by the guidelines highlighted.”* [our translation]

P6 - *“The guide is well organized and efficient in its proposal, but perhaps a version with dark colors (dark mode) could be a better choice for readers.”* [our translation]

At the end of the analysis, it was possible to identify that the participants had many positive points about the guide and how it could be used in future projects.

7 Discussion

The SLM highlighted that studies in HCI, despite adopting a more inclusive perspective, still lack practical and structured guidelines specific to Feminist HCI. This scarcity suggests that practical consolidation and instruments to translate the principles of Feminist HCI and provide guidance for professionals are still missing in the field. The objective of this

study was to fill this need by consolidating these guidelines through the creation of a guide. The following discussion presents an initial evaluation of this artifact, demonstrating the perceptions of usefulness and acceptability based on the TAM model [Venkatesh and Bala, 2008].

The perceived usefulness among evaluation participants indicates the need for tools to combat oppression-related problems in HCI, such as those identified by Ribeiro [2020]. In addition, validating the guide is important, as it provides practical steps to prevent high-risk social failures, the existence of which was demonstrated by Paim *et al.* [2020]. The guide's acceptability shows that the solutions it proposes are in line with what users and the existing literature are seeking [Moro and Frigo, 2020].

The SLM revealed a scarcity of material with well-defined guidelines and limited practical implementation of these guidelines, similar to what Córdova *et al.* [2022] found when reporting difficulty in identifying gender-incorporation patterns even in specific domains. This reality is directly aligned with the low level of knowledge of the evaluation respondents regarding the concept of Feminist HCI. This finding provides evidence that supports the conclusion of Chivukula and Gray [2020], reinforcing the gap between theory and practice and the potential for improvement in practical application.

These results suggest that Feminist HCI is still not widely disseminated in the IT field. Therefore, it is desirable that the guide be used so that Feminist HCI proposals are increasingly incorporated into best practices in interaction and interface design, promoting gender equity and inclusion in HCI.

The work of Bardzell [2010] proposes quality criteria for feminist interaction design, which were observed and categorized within the guide's guidelines. The acceptance and perceived usefulness of this artifact suggest that the guide acts as a starting point for integrating feminist perspectives into HCI, validating the applicability and practical value of the concepts proposed by Bardzell [2010] in software development.

8 Threats to Validity

The methodological choices made in developing this study impose certain limitations and introduce potential threats to the validity of the results, which must be addressed. The threats were categorized into different stages of the research, one in the SLM part and one in the assessment of acceptance through TAM.

A significant limitation was related to the time frame applied, which restricted the inclusion of articles published in the last five years. It is widely recognized that the concepts of Feminist HCI proposed by Bardzell [2010] could ensure a broader approach to results. However, changing the period at this stage could lead to inconsistencies between the results in the original mapping and the current version of the proposed guide. Therefore, we acknowledge this limitation and propose that this review be expanded in future work to ensure a broader overview of results.

The evaluation of the guide's acceptance, structured according to TAM [Venkatesh and Bala, 2008]. The strategy adopted for recruiting participants was restricted mainly to the academic environment, resulting in a limited number of

participants already familiar with HCI concepts. This selection bias limits the acceptance results to broader contexts, in the case of professionals in the industry or those less exposed to HCI theory.

The study represents an initial step forward in the systematization and applicability of guidelines aligned with Feminist HCI. Future work could extend the mapping period, deepen validation with diverse audiences, and insert the guidelines into educational and industrial contexts, strengthening their maturity and contributing to reducing the gap between theory and practice.

9 Final Considerations

This research is an extension of the study by de Oliveira Freires *et al.* [2024], which set out to identify existing guidelines in the literature for interaction and user interface design from a Feminist HCI perspective [Bardzell, 2010] and highlighted the importance of considering gender and equity issues when building technologies. This article developed a guide containing these guidelines as a tool for interface design. In addition, an acceptance evaluation was carried out, structured based on the TAM model [Venkatesh and Bala, 2008], which is widely used to predict the adoption of new technologies based on the individual's intention to use them.

The results show that the guide has a strong tendency towards acceptance, since the data collected suggests that the ease of use and usefulness perceived by the respondents had a high level of agreement with the statements. In addition, the users' behavioral intention was also favorable to using the guide for creating interfaces, since all respondents said they would use it in projects. Finally, points for improvement were also identified, such as unclear information about interacting with the guide. However, it is worth noting that the participants showed that they understood the importance of the guide's purpose, stating that it is necessary to recognize different identities and avoid discrimination in interfaces.

Since the study by de Oliveira Freires *et al.* [2024], we have seen the importance of overcoming cultural barriers to encourage true inclusion in design practices. Also, the application of Feminist HCI guidelines can result in relevant benefits such as greater user engagement, greater acceptance, and better accessibility of technologies, as well as a reduction in gender stereotyping in interactive systems.

Hopefully, this study will provide a knowledge base on feminist guidelines for interaction and user interface design present in the guide, offering practical insights for professionals and researchers interested in incorporating inclusive approaches into their projects. In addition, it seeks to contribute to reducing the gap between theory and practice in applying Feminist HCI, promoting greater awareness of gender and diversity issues in human-computer interaction.

In this way, this work contributes to raising awareness and adopting inclusive approaches in HCI by proposing objective and clear material for interface design professionals. The preliminary results of this study indicate that the guide will be an important tool to support specialists in creating more inclusive interfaces.

In future research, we propose to broaden the temporal scope to cover fundamental literature on the concepts of

Feminist HCI. Investigate effective strategies for adopting the guide and deepen the evaluation by applying it to industry professionals. Subsequent work should explore the use of the guide in real software projects to observe the impacts generated and validate the acceptance model based on real-world behavior, in addition to self-declared intentions. Also, the adoption of the guidelines as material proposed in technology courses for cultural awareness among future professionals. These lines of research can encourage greater integration of guidelines from a feminist perspective in the development of technologies, in order to create more equitable, inclusive, and accessible systems for all types of users.

Declarations

Acknowledgements

The authoring team would like to thank the readers and evaluators of the Guidelines for Interface Design with a Focus on Feminist HCI. Also, ChatGPT was used to generate tables in this work, as well as for translation, rewriting sentences to make them clearer, and proofreading and grammar correction.

Funding

This research was funded by the Institutional Scientific Initiation Scholarship Program (PIBIC) of the Federal University of Ceará (UFC) and by the Ceará Foundation for Support to Scientific and Technological Development (FUNCAP) - processes BP5-00197-00016.01.00/22 and PRH-0212-00011.01.00/23.

Authors' Contributions

- Geslâne Rodrigues de Sena contributed to formal analysis, investigation, data curation, writing – original draft.
- Kellen Raizy Noronha Monteiro contributed to formal analysis, investigation, data curation, writing – original draft.
- Maria Isabele de Oliveira Freires contributed to formal analysis, investigation, data curation.
- Valéria Maria da Silva Pinheiro contributed to writing – review & editing, supervision.
- Anna Beatriz Marques contributed to conceptualization, methodology, writing – review & editing, supervision.

Competing interests

The authors declare that they have no competing interests.

Availability of data and materials

The raw data extraction sheets used during this study are available for verification and reproducibility at the electronic address in the GitHub repository: <https://github.com/Geslane/SLM-HCI-F-Guidelines-Data-2023>. The guide developed and evaluated during this study is available at the link <https://view.genially.com/67bdf143992ebd68b200673a/interactive-content-guia-de-diretrizes-para-design-de-interfaces-com-foco-na-ihc-feminista>. The form to evaluate the guide is available at the following web address https://drive.google.com/file/d/1Uz7JFcTeUv5B48Zrr_tfvNSpGuch6JBo/view?usp=sharing.

Further relevant information

Citation Diversity Statement: This work is grounded in Feminist Human-Computer Interaction (Feminist HCI), which addresses diversity, equity, and inclusion in technology design. The authors made a conscious effort to include references from diverse research communities and perspectives. The reference list includes foundational works in Feminist HCI, such as those by Bardzell [2010]. It also contains contributions from researchers in gender studies,

HCI, and inclusive design. The systematic literature mapping in this study incorporated publications from multiple digital libraries and included international and Brazilian venues. Sources in both English and Portuguese were reviewed to broaden the representation of research contexts and scholarly voices.

References

- Amaral, M., Almeida, L., and Oliveira, L. (2023). Quem o feminismo em IHC deixou de fora? Proposta de uma agenda a partir de correlações entre feminismos e IHC no Brasil. In *Anais do 2º Workshop em Culturas, Alteridades e Participações em IHC (CAPAIHC)*, pages 62–67, Maceió/AL. Sociedade Brasileira de Computação. DOI: <https://doi.org/10.5753/capaihc.2023.236581>.
- Baharum, A., Rahim, E. A., Hanapi, R., Noor, N. M., and Yusop, N. M. (2019). Evaluating gender-based mobile shopping application using eye-tracking technology. *Indonesian Journal of Electrical Engineering and Computer Science*, 13:1095–1101. DOI: <http://doi.org/10.11591/ijeecs.v13.i3.pp1095-1101>.
- Bardzell, S. (2010). Feminist HCI: Taking stock and outlining an agenda for design. In *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems*, CHI '10, page 1301–1310, New York, NY, USA. Association for Computing Machinery. DOI: <https://doi.org/10.1145/1753326.1753521>.
- Bardzell, S. and Bardzell, J. (2011). Towards a feminist HCI methodology: social science, feminism, and HCI. In *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems*, CHI '11, page 675–684, New York, NY, USA. Association for Computing Machinery. DOI: <https://doi.org/10.1145/1978942.1979041>.
- Basili, V. R. (1993). Applying the goal/question/metric paradigm in the experience factory. *Software quality assurance and measurement: A worldwide perspective*, 7(4):21–44.
- Chiarelli, B. and Cacciaguerra, E. (2023). ICT for All: Where Do We Stand? *Studies in health technology and informatics*, 303:95–103. DOI: <https://doi.org/10.3233/SHTI230404>.
- Chivukula, S. S. and Gray, C. M. (2020). Bardzell's "Feminist HCI" legacy: Analyzing citational patterns. In *Extended Abstracts of the 2020 CHI Conference on Human Factors in Computing Systems*, pages 1–8. DOI: <https://doi.org/10.1145/3334480.3382936>.
- Córdova, K. A., Klock, A. C., and Gasparini, I. (2022). Rumor à concepção de diretrizes para design da gamificação sob a ótica da IHC feminista. In *Anais Estendidos do XXI Simpósio Brasileiro sobre Fatores Humanos em Sistemas Computacionais*, pages 116–119, Porto Alegre, RS, Brasil. SBC. DOI: https://doi.org/10.5753/ihc_estendido.2022.226020.
- Córdova, K. A., Klock, A. C. T., and Gasparini, I. (2023). Investigando a inter-relação entre gamificação, gênero e IHC feminista: uma revisão sistemática da literatura. In *Anais do 17º Women in Information Technology (WIT)*, pages 159–170, João Pessoa/PB. Sociedade Brasileira de Computação. DOI: <https://doi.org/10.5753/wit.2023.230541>.
- Craiu, M.-V. and Iancu, I. R. (2022). Is technology gender neutral? A systematic literature review on gender stereotypes attached to artificial intelligence. *Human Technol-*

- ogy, 18(3):297–315. DOI: <https://doi.org/10.14254/1795-6889.2022.18-3.6>.
- Dahri, M., Shargh, P. Z., Sahebzamani, A., Ghasemi, R., Jahangir, M., and Moghbeli, F. (2023). Design and usability evaluation of nutritional counseling web app (virtual clinic) for pregnant women. *Front Health Inform*, 12:143. DOI: <https://doi.org/10.30699/fhi.v12i0.433>.
- De Amorim, I. L. B., Dos Santos, S. S., Da Silva, I. M. M., Rodrigues, K. R. D. H., and Mota, M. P. (2023). Gender Nuances in Human-Computer Interaction Research. In *Anais do Simpósio Brasileiro sobre Fatores Humanos em Sistemas Computacionais (IHC)*, pages 1–12. DOI: <https://doi.org/10.1145/3638067.3638077>.
- de Jesus, A., Rios, F., Melezinski, H., and Costa, M. F. (2023). Mulheres, tecnologias e design participativo. In *Anais do 2º Workshop em Culturas, Alteridades e Participações em IHC (CAPAIHC)*, pages 50–55, Macaíó/AL. Sociedade Brasileira de Computação. DOI: <https://doi.org/10.5753/capaihc.2023.236574>.
- de Oliveira Freires, M., Monteiro, K. N., de Sena, G. R., de Araújo Silva, J., da Silva Pinheiro, V., and Marques, A. (2024). Guidelines for Feminist HCI in practice: How far are we? In *Anais do XXIII Simpósio Brasileiro sobre Fatores Humanos em Sistemas Computacionais*, pages 314–325, Porto Alegre, RS, Brasil. SBC. DOI: <https://doi.org/10.1145/3702038.3702069>.
- Gunung, L. (2020). Feminist Standpoint Theory: Conceptualization and Utility. *Dhaulagiri Journal of Sociology and Anthropology*, 14:106–115. DOI: <https://doi.org/10.3126/dsaj.v14i0.27357>.
- Harding, S. (2004). Introduction: Standpoint theory as a site of political, philosophic, and scientific debate. In Harding, S., editor, *The Feminist Standpoint Theory Reader: Intellectual and Political Controversies*, pages 1–15. Routledge, New York; London.
- Hewett, T., Baecker, R., Card, S., Carey, T., Gasen, J., Tremaine, M., Perlman, G., Strong, G., and Verplank, W. (1992). ACM SIGCHI Curricula for Human-Computer Interaction. DOI: <https://doi.org/10.1145/2594128>.
- Kitchenham, B., Madeyski, L., and Budgen, D. (2023). SEGRESS: Software engineering guidelines for reporting secondary studies. *IEEE Transactions on Software Engineering*, 49:1273–1298. DOI: <https://doi.org/10.1109/TSE.2022.3174092>.
- Lima, P., Salgado, L., and Bim, S. (2025). Construindo personas e cenários de uso com base em valores: Uma abordagem da IHC Feminista. In *Anais do XXIV Simpósio Brasileiro sobre Fatores Humanos em Sistemas Computacionais*, pages 1538–1564, Porto Alegre, RS, Brasil. SBC. DOI: <https://doi.org/10.5753/ihc.2025.10909>.
- Moro, F. F. and Frigo, L. B. (2020). Expressando emoções e sentimentos no facebook. *Anais do Computer on the Beach*, 11(1):148–155. DOI: <https://doi.org/10.14210/cotb.v11n1.p148-155>.
- Motahar, T. and Ahmed, N. (2022). Exploring Technology Usage of Southeast Asian Elderly Women for Better Mental Health during COVID-19 Pandemic. In *Extended Abstracts of the 2022 CHI Conference on Human Factors in Computing Systems*, CHI EA '22, New York, NY, USA. Association for Computing Machinery. DOI: <https://doi.org/10.1145/3491101.3519675>.
- Paim, P., García, L. S., and Pereira, E. G. (2020). No to violence against any woman! requirements for inclusive mobile applications to denounce domestic violence. In *Proceedings of the 19th Brazilian Symposium on Human Factors in Computing Systems*, IHC '20, New York, NY, USA. Association for Computing Machinery. DOI: <https://doi.org/10.1145/3424953.3426645>.
- Petticrew, M. and Roberts, H. (2006). *Systematic Reviews in the Social Sciences: A Practical Guide*, volume 11.
- Ribeiro, K. (2020). A gender analysis of interaction in online work meeting tools. In *Proceedings of the 19th Brazilian Symposium on Human Factors in Computing Systems*, pages 1–6. DOI: <https://doi.org/10.1145/3424953.3426647>.
- Strengers, Y., Sadowski, J., Li, Z., Shimshak, A., and 'Floyd' Mueller, F. (2021). What can HCI learn from sexual consent? A feminist process of embodied consent for interactions with emerging technologies. In *Proceedings of the 2021 CHI Conference on Human Factors in Computing Systems (CHI '21)*, pages 1–13, New York, NY, USA. Association for Computing Machinery. DOI: <https://doi.org/10.1145/3411764.3445107>.
- Tannenbaum, C., Ellis, R. P., Eyssel, F., Zou, J., and Schiebinger, L. (2019). Sex and gender analysis improves science and engineering. *Nature*, 575:137–146. DOI: <https://doi.org/10.1038/s41586-019-1657-6>.
- Tlachac, M., Reisch, M., Lewis, B., Flores, R., Harrison, L., and Rundensteiner, E. (2022). Impact assessment of stereotype threat on mobile depression screening using bayesian estimation. *Healthcare Analytics*, 2:100088. DOI: <https://doi.org/10.1016/j.health.2022.100088>.
- Venkatesh, V. and Bala, H. (2008). Technology Acceptance Model 3 and a Research Agenda on Interventions. *Decision Sciences*, 39(2):273–315. DOI: <https://doi.org/10.1111/j.1540-5915.2008.00192.x>.
- Winkle, K., McMillan, D., Arnelid, M., Harrison, K., Balaam, M., Johnson, E., and Leite, I. (2023). Feminist Human-Robot Interaction: Disentangling Power, Principles and Practice for Better, More Ethical HRI. In *Proceedings of the 2023 ACM/IEEE International Conference on Human-Robot Interaction (HRI '23)*, page 11, Stockholm, Sweden. ACM/IEEE. DOI: <https://doi.org/10.1145/3568162.3576973>.