

B. Full-text reviewed articles

No	Year	Title	Authors	Country	Methodology	Level	Description
1	2020	STEM Women in Ecuador: a Proposal to Reduce the Gender Gap	Luz Tobar Subía, Victoria Proaño, Carlos Vásquez	Ecuador	Quantitative / Propositive	Middle school	Presents actions carried out within the framework of the W-STEM project to create a new vision of the female role in technical careers. Proposes an action plan focused on secondary schools in northern Ecuador, based on three transversal axes: access, attraction and orientation [1].
	2020	Co-creation of BootCamps Focused on Promoting STEM	Germania Rodríguez Morales, Alicia García-Holgado, Samanta Patricia Cueva Carrión, Jorge Luis Jaramillo	Ecuador	Qualitative	High school	Presents the results obtained in the implementation of workshops aimed at attracting women to STEM fields in the context of the European W-STEM project [2].
2	2021	The first experiences of the UNA STEM network	Irene Hernández, Maria Arias Andres, Carolina Esquivel	Costa Rica	Descriptive	Elementary and middle school	Presents the experiences of the UNA STEM Network during its first year of creation. The network is a proposal of several academics from the Faculties of Exact and Natural Sciences, and Earth and Sea of the National University of Costa Rica [3].
			Dobles, Khalia Calvo Sánchez, Francisco Loría Valverde, Christian Chaverri Ramos				
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4	2021	Gender gap perception of computer science students in Costa Rica: a case study in two public universities	Alicia García-Holgado, Maria Estrada, Gabriela Marín, Francisco José García-Peñalvo	Costa Rica	Descriptive	Higher education	Analyzes computer science students' perceptions of the gender gap in computer science programs at two public universities in Costa Rica. Uses the validated GENCE 2.0 (GENder perspective in Computer Engineering questionnaire) instrument adapted to the Costa Rican context, which identifies students' perceptions of gender issues [4].
	2021	STEM females Ecuador, initiative, and the labor scenery	Germania Rodriguez Morales, Samanta Cueva Carrión, Luz María Tobar, Andrea Carrión Herrera	Ecuador	Descriptive	Higher education and professional level	Presents an analysis of the findings of the first approach to women in STEM fields in Ecuador, with the aim of proposing and promoting the formation of a community of women in STEM [5].
6	2021	Niñas Pro: an initiative to educate, inspire and empower women	Mabel Vidal, Jazmine Maldonado, Teresa Bracamonte, Florencia Miranda, Antonia Labarca, Jocelyn Simmonds	Chile	Qualitative/Quantitative	Middle school	It presents the experience of Niñas Pro, a non-profit organization in Chile that since 2016 has implemented workshops and courses in programming and computer science for female high school students [6].
	2021	An experience on virtual hands-on workshops to bring teenage girls to Computer	Andrea Delgado, Aiala Rosá, Adriana Marotta, Camila Sanz, Raquel Sosa,	Uruguay	Descriptive	Middle school	Presents the experience of two practical virtual workshops on programming and data held at the Faculty of Engineering of the University of the Republic, Uruguay, aimed at teenagers to introduce them to the field of Computer Science [7].
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8	2022	Science in Uruguay	Mercedes Marzoa, Lorena Etcheverry	Brasil	Mixed	Higher education Digital girls project	This paper presents a qualitative analysis of outreach and research activities carried out within the Digital Girls Project in Mato Grosso, Brazil, during 2020 and 2021. The study highlights the project's role in promoting gender equity in STEM/STEAM fields through initiatives that involve both undergraduate and graduate students. A qualitative and quantitative documentary analysis of reports on formative experiences within the project. It considers research and university outreach activities carried out as part of the project. The following indicators are addressed: sense of belonging, organizational climate, vocational interest, mentoring support networks, institutional awareness, empowerment, motivation, access to resources, and participation [8].
	2022	Fomento à Equidade de Gênero nas Áreas STEAM: Experiências Formativas do Projeto Meninas Digitais de Mato Grosso	De Lima, W. Sassi, S., Costa, M. F., Casagrande, A., & Maciel, C.	6 países latinoamericanos involucrados: Chile, Colombia, Costa Rica, Ecuador, México. España como coordinador.	Qualitative	Higher education	This paper presents the development and implementation of the W-STEM Mentoring Network, a strategy within the broader W-STEM project aimed at improving the attraction, access, retention, and guidance of women in STEM programs across Latin American universities. An evaluation approach is proposed, but no results are presented. Participation, empowerment, motivation, student satisfaction, mentoring support networks, institutional awareness, and sense of belonging are addressed [9].
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10	2022	Gender Diversity in Technology Sector: Barriers and Perceptions of Success of Women in Porto Digital	Silva, L. L. S. B., Sampaio, S., & Marinho, M. L. M.	Brasil	Systematic literature review/Bibliographic mapping	Work environment	It does not evaluate a specific STEM mentoring program or project. This study investigates the persistent underrepresentation of women in software development, despite broader societal advances in gender equality [10].
	2022	Factors that Prompted a Sample of Female Students to Choose an IT Career. A Regionalized Exploratory Study at Three National University Campuses	Cabrera Alzate, S., & Hernández Ruiz, I.	Costa Rica	Quantitative/Propositional	Higher education	The article does not meet the PICO or PRISMA criteria as an intervention on mentoring in STEM. It is useful as motivational context and a baseline on female vocation in IT [11].
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12	2022	Applications, Admissions and Graduations of Women in Computer Science Careers for the Universidad Nacional de Computer Science Careers for the Universidad	Mendez Xavier, E. L., von Lücken, C., & Cantero, R.	Paraguay	Descriptive and longitudinal analysis	Higher education	This article does not evaluate a STEM mentoring program or intervention. It is a descriptive, longitudinal study focused on analyzing enrollment, admission, transfer, and graduation data by gender in computer science programs at a Paraguayan university (FP-UNA) [12].

		Nacional de Asunción					
13	2022	Analysis of the Participation of Female University Students in STEM/ICT Careers in El Salvador	Reynosa, G., & Aguilar, M.	El Salvador	Descriptive analysis	Higher education	This article does not evaluate any specific STEM mentoring program or intervention. Its focus is a descriptive analysis of enrollment and graduation data for women in STEM majors between 2019 and 2021 at three universities in El Salvador [13].
14	2023	An educational intervention for inclusion of deaf students in computing	V. Souza, M. Holanda, C. Koike, A. Araujo	Brasil	Applied	Higher education	Educational intervention for the inclusion of deaf students in computing. Deaf students actively participate in the creation of technological projects, demonstrating effective inclusion [14].
15	2023	Analysis of the inclusion of female students in STEM/ICT majors at the Gerardo Barrios University of El Salvador: a gender perspective	Gisela Yasmín García Espinoza	El Salvador	Quantitative	Higher education	Analysis of women's inclusion in STEM/ICT careers at a Salvadoran university. The article emphasizes the need to encourage female students' active participation in academic and extracurricular activities for their comprehensive development [15].
16	2023	Code Huntresses: promoting gender equity in ICTs	Romina García, Alejandra Armendariz, Julieta Umpierrez, Claudina Rattaro	Uruguay	Case study with a qualitative approach	Elementary and middle school	Educational initiative that promotes girls' interest in ICT through fun workshops. More than 1,500 teenagers have participated in the project's activities, indicating high participation and outreach in the educational community [16].
17	2023	Experience in the creation of the	E. Hernández-Leal, G. Gasca-	Colombia	Qualitative	Higher education	Training experience and achievements of a community of women (JUMI) in engineering. The community has achieved active

18	2023	JUMI Community: Achievement after two years	Hurtado, M.C. Gómez-Álvarez		and descriptive case study		participation by students and teachers in various activities, both inside and outside the university [17].
	2023	International mobility for enhancing leadership in women engineering students: a case study connecting Colombia and Spain	Alicia García-Holgado, Sonia Verdugo-Castro, Vilma Viviana Ojeda-Caicedo, Sonia H. Contreras-Ortiz	Colombia, España	Qualitative case study	Higher education	Study of international mobility as a strategy to promote female leadership. The program encourages active participation by female students in academic and leadership activities, both locally and internationally [18].
19	2023	Mobile application as a technological alternative for the inclusion of women in STEM areas	Guadalupe Cuascota, Alexander Guevara Vega, Luz María Tobar Subía, Jorge Caraguay	Ecuador	Study case	Higher education	Mobile app as a technological alternative to include women in STEM. The tool promotes the active participation of female students in their educational process and in learning communities, encouraging their involvement in STEM-related activities [19].
20	2023	Participation of university women under regulations and strategies promoting gender equity in STEM/ICT careers in El Salvador.	Gabriela Reynosa, and Marlene Aguilar	El Salvador	Mixed	Higher education	Participation of female university students under gender equality strategies in STEM. The research analyzes the participation of women in STEM (Science, Technology, Engineering, and Mathematics) university degrees in El Salvador during the period 2013–2022. It focuses on various public policies, private initiatives, and training programs [20].
21	2023	Perceptions of the gender gap in higher education and how to	Janneth Chicaiza, Soledad Segarra-	Ecuador	Qualitative	Higher education	Perception of gender gap in two engineering majors and ways to integrate women. The perception of a gender gap can limit women's active participation in academic and extracurricular activities related to engineering [21].

		improve female students' integration: A case study in two engineering majors of UTPL	Morales, Germania Rodríguez, and Fanny Cevallos				
22	2023	ProgramADAmonte: plataforma educativa y social para acercar la programación a niñas y adolescentes	Rebeca Fernández, Evelyn Kremer, Andrea Delgado	Montevideo, Uruguay	Applied and development al	Elementar y middle school	Platform for teaching programming to girls and teenagers. The tool promotes girls' active participation in their educational process, encouraging their involvement in activities related to programming [22].
23	2023	The Brazilian professional, scientific, and technological education system as an instrument for promoting gender equality in computing	Sara Luiz de Farias, Maria Isabela Silva Nunes, Natália do Carmo Louzada, Thalia Santos de Santana, Ramayane Bonacin Braga, and Adriano Honorato Braga	Brasil	Mixed	Elementar y middle school	Technology education in Brazil as a tool to promote equality in computing. The initiatives are designed to encourage women's active participation in computing-related activities, promoting their involvement and commitment [23].
24	2024	Challenging the gender gap in STEM with Python and Data Science: case of the National Technical	María Biarreta Portillo ^{1,2,†} , Josué Castro Ramírez, María Mora Cross, Kattia	Costa Rica	Applied research	Elementar y middle school	Reducing the gender gap in STEM (Science, Technology, Engineering, and Mathematics) fields in Costa Rica, where female participation is 30%, lower than the Latin American average of 45-55%. To this end, a training program in Python and data science was implemented, aimed at the Software Engineering community at the UTN [24].

		University Costa Rica	de	Rodríguez Brenes, and Te Chen Huang					
25	2024	Initiatives Reduce Gender Gap Senior Management: Actions Developed Organizations in Chile	to the in by in	Lilian Martín, García- Holgado, Ángeles Domínguez	San- Alicia	Chile, España, México	Exploratory study and policy review	Professio nal	This article analyzes initiatives implemented by Chilean organizations to reduce the gender gap in senior management positions. It examines regulations such as gender quotas, work-life balance policies, the NCh3262 standard, and training programs. It highlights persistent challenges, such as gender stereotypes, and emphasizes the importance of making women in management positions more visible and promoting diverse and equitable management teams [25].
26	2024	Hack4women: search of framework	In a	Giannina Costa, García- Holgado, Pamela Álvarez	Alicia P.	Chile	Study case		This article analyzes the Chilean initiative “Hack4women,” a series of hackathons with a gender focus in STEM, with the aim of establishing a methodological framework that can be replicated in other contexts. It examines the editions held, identifying best practices, impact metrics, and strategies to reduce the gender gap in technology through collaborative events [26].
27	2024	Analysis of the professional development level of participants of the TecnoGirls project at the Gerardo Barrios University of El Salvador		Gisela Espinoza, Jeany Argueta		El Salvador	Retrospectiv e quantitative research with complement ary qualitative analysis	High school	The study analyzes the level of professional development achieved by participants in the TecnoGirls project at Gerardo Barrios University, evaluating technological, educational, and socio-professional dimensions. Through questionnaires and interviews, a positive perception of the program's impact on digital skills, learning strategies, and preparation for the workplace was identified [27].

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