Ezzahir Journal for Communication and Media Studies | الزّهير Ezzahir | Volume05- Issue 02 (June 2026) pp 12 - 34

EISSN 2830-8352 *ISSN 2800-1133*

Developing a Digital Tool for Generating Gender-Equitable Citations in the Context of Arab Culture: An Applied Study

تطوير أداة رقمية لتوليد الاستشهادات المرجعية المنصفة للنوع الاجتماعي في سياق الثقافة العربية: دراسة

Dr. Talal Nadhim Azzuhairi [1*]

[1] Dep. of Information and Knowledge Technologies / Al-Mustansiriya University, drazzuhairi@gmail.com

Received:08/03/2026 **Accepted :21/04/2026** **Published le:30/06/2026**

Abstract:

This study addresses the problem of representing Arabic personal names within dominant international citation systems and the implications of applying them in the Arab context, which involves the reduction of the first name, particularly in the case of female authors .In these systems, the family name serves as the primary identifier, leading to a decline in the presence of the personal name and weakening gender representation within academic discourse .Based on this issue, the study aimed to design and develop an Arabic citation style that accounts for the linguistic and cultural specificities of Arabic names while promoting the principle of gender-equitable authorship through the formulation of a methodological standard titled the (Iraqi Reference Citation Style) IQRC.

The study adopted a descriptive-analytical approach to construct the theoretical framework of the IQRC style, followed by an applied approach to develop a web-based digital tool that automatically generates reference citations according to the rules of this style .The tool was designed using HTML, CSS, and JavaScript technologies.

Field test results demonstrated the tool's effectiveness in addressing the structural issues associated with applying Western styles to Arabic names, contributing to fewer documentation errors and enhancing the clarity of name identity. The study concludes that the localization of documentation systems in the Arab environment is not merely a formal adjustment but represents a step toward achieving epistemic justice and fair representation within the scientific communication system.

Keywords: Arabic reference citation; Gender equity in citation; IQRC style; Arabic naming structure; Digital citation tools.

[*] *Correspondant author*

ISSN : 2543-3938 - EISSN : 2602-7771

ملخص

تتناول هذه الدراسة إشكالية تمثيل الهوية الاسمية العربية في أنظمة الاستشهاد المرجعي الدولية السائدة، وما يترتب على تطبيقها في السياق العربي من اختزال للاسم الأول، ولا سيما في حالة المؤلفات الإناث، حيث يُقدَّم اسم العائلة بوصفه المعرف الرئيس، مما يؤدي إلى تراجع حضور الاسم الشخصي وإضعاف التمثيل الجندري داخل الخطاب الأكاديمي. وانطلاقًا من هذا الإشكال، هدفت الدراسة إلى تصميم وتطوير أسلوب استشهاد عربي يُراعي الخصوصية اللغوية والثقافية للاسم العربي، ويعزّز مبدأ العدالة التأليفية بين الجنسين، وذلك من خلال صياغة معيار منهجي تحت مسمى (أسلوب الاستشهاد المرجعي العراقي) IQRC.

اعتمدت الدراسة منهجًا وصفيًا تحليليًا في بناء الإطار النظري لأسلوب IQRC، تلاه منهج تطبيقي لتطوير أداة رقمية إلكترونية تعمل عبر المتصفح لتوليد الاستشهادات المرجعية آليًا وفق قواعد هذا الأسلوب. وقد صُممت الأداة باستخدام تقنيات HTML وCSS وJavaScript، أظهرت نتائج الاختبار الميداني للأداة فاعليتها في معالجة الإشكاليات البنيوية المرتبطة بتطبيق الأساليب الغربية على الأسماء العربية، وأسهمت في تقليل الأخطاء التوثيقية وتعزيز وضوح الهوية الاسمية. وتخلص الدراسة إلى أن توطين أنظمة التوثيق في البيئة العربية لا يُعدّ مجرد تعديل شكلي، بل يمثل خطوة نحو تحقيق العدالة المعرفية والتمثيل المنصف داخل منظومة الاتصال العلمي.

الكلمات المفتاحية الاستشهاد المرجعي العربي؛ العدالة الجندرية في التوثيق؛ أسلوب IQRC؛ الهوية الاسمية العربية؛ أدوات التوثيق الرقمية.

INTRODUCTION

Scholarly work leans on citation methods more than just organizing references might suggest. These systems quietly shape how researchers are seen, shaping both knowledge claims and personal recognition inside academic circles. Yet nearly all major formats - APA, MLA, Chicago - grew out of Western traditions, where last names take center stage and given names shrink into initials or vanish altogether. That setup fits smoothly in cultures that prioritize surnames. But problems emerge elsewhere, especially across Arab communities, where naming carries broader meaning and structure differs deeply. First up, in Arab tradition, a person's given name isn't just some extra tag - it stands front and center, showing who they are plus signaling gender right away. On the flip side, last names in Western records act like main labels, usually tied to dad's line. Slap that system onto Arab naming without changes, then women's first names vanish - buried under father or clan tags. So instead of seeing her you see his shadow .

That shift hides her presence tilting how credit gets shared across academic spaces. The tilt? Not because facts demand it. Nope. It comes from forcing a format blind to Arabic ways of naming and meaning. One big thing started it all: today's standard ways of listing who wrote what do not fit how names work across cultures especially among Arabs. Because of this some systems blur the role of given names - often hiding women's names farther down lists - making them seem less present than they are. It slips by unnoticed yet it shapes how we see whose voice matters in research circles. What looks like a small detail about commas and order turns out to touch fairness in knowledge sharing. So the goal here becomes clear: build something digital that reshapes citations so both genders show up equally well in Arab academic settings. The method leans on code trained to tell apart male from female names then shifts parts around - lifting the first name higher when there's no obvious last name or when identity gets lost in long chains of words. One big reason this work matters? It brings documentation into line with how Arabic organizes naming .

A new kind of framework shows up here - built to stay true to research rules yet shaped around Arab traditions. What stands out is how it lifts visibility for women scholars, making sure their voices do not disappear under inherited surname patterns. Instead of fading into group identities, individual achievement gets space to show. Another angle: fairness gains ground when academic spaces reflect who actually produces knowledge. Behind the scenes a system takes form - one that fits

smoothly into existing digital tools used for managing references. Not just theory, it works in practice ready to grow alongside current platforms. Its value spreads beyond one region, touching wider efforts in organizing information fairly. This moment invites fresh thinking about how tech, culture, and fair access to knowledge connect. So instead of only questioning current citation habits, the research moves further - introducing a working tool designed to correct imbalances in how scholars appear in Arab academic texts. The core idea is straightforward: fairness in knowledge starts by honoring each thinker's name.

I. Citation Methods

Citing prior scholarship forms a constitutes a fundamental component of academic integrity, demonstrating the cumulative nature of scientific knowledge. Because of this, such references now serve as key markers in worldwide systems that judge the influence and value of scholarly papers. In 1955, Garfield laid the foundation for citation indexing (Garfield, 1955) shaped the science behind tracking these links, arguing that being cited reflects strong research. His thinking eventually led to organized databases for citations across both natural and social sciences by (Garfield, 2007). Within this framework, four primary ways of recording sources clearly emerge

One begins with APA format, created by the American Psychological Association back in 1929. Across fields like psychology, education, or business studies, it shows up often. In-text citations follow the author–date format, for example "Azzuhairi, 2025", Clearer writing? More trustworthy results? That is what drives its design (RAHMAT, 2024). Not far behind sits MLA style, shaped by the Modern Language Association. It is predominantly used in the humanities, including literature and linguistics. A short form inside the text pairs with the writer's last name backward plus page count, so tracking origins feels smooth while moving through lines (ILHAM, 2024). Following that comes Chicago's method, shaped at the University of Chicago. Built into its design are two paths - one leans on footnotes and full reference lists, often seen in arts fields; another rides on creator-year tags, typical in science zones - giving wide coverage across disciplines (Chicago-Style Citation Quick Guide, 2026). Next appears Harvard's way, rooted in flipped surnames paired with year stamps, widely found in cultural studies, society-focused areas, and management courses. Its strength lies in bending easily to fit diverse materials, yet since no single rulebook exists, schools may apply it differently (FUADAH, 2024).

Besides those approaches from America, global variations exist - take Russia's GOST method, organizing sources alphabetically under GOST 7.0.5 rules while tagging them with numbers in brackets (GOST, 2026). Then comes China's GB/T 7714 system, presenting either numbered markers or name-and-year formats, assigning unique labels like [M] for monographs and [J] for journal pieces, giving scholars a sharp, adaptable way to handle mixed-language research records (GB/T 7714 Citation Style, 2026)

Yet each of these forms grew from backgrounds far removed from Arabic speech and culture. Though varied they never aimed to fit how Arabic words take shape - often built on three or four root letters while keeping gender balance in check. Turning a woman scholar's full presence into just a last name - one tied to her father or spouse - hides who she truly is within research papers. That erasure stirred one thinker to seek rules shaped by Arab norms instead. A system meant to honor writers equally whether man or woman began forming quietly beneath such need.

II. Specifications Document for Arabic Citation Style:

Starting with a look at what came before, it became clear that common Western methods did not fit how Arabic names work. Because of this mismatch, a new effort took shape - to build a consistent way of citing sources in Arabic. The core idea rested on two ideas: keep each writer's full name intact, especially including women's first names so they are properly seen. Out of this thinking grew the Iraqi Reference Citation Style, known as IQRC. It stands as the first structured approach made just for handling the form and flow of Arabic personal names in research.

Right off the start, the specs laid out here mark step one of the work ahead. Built on these pages is a core structure guiding how ideas connect, where real-world uses are spelled out, followed by clear ways to handle references through three layers - within text lines, at page bottoms, and in full source lists. From this foundation rose what came next: shaping a digital helper able to build Arabic-style citations without manual effort. Rules tucked into that earlier file turned into working logic behind the scenes. Researchers now get support that keeps formatting steady and correct, yet still respects how Arabic naming works. Last piece? Making sure cultural detail isn't lost when tech takes over.

II.1. Definition and Name of the Style

IQRC: Abbreviation for Iraqi Reference Citation Style. It is a citation style developed specifically for Arabic academic writing. It addresses structural problems in imported Western citation styles and establishes rules suited to the nature of the Arabic name in its three- or four-part form.

IQRC operates on three levels of documentation working in harmony: in-text citation, footnotes, and reference list — all governed by unified rules that preserve the full identity of the author and give visibility to female authors who were hidden in traditional styles.

> **Full Name: Iraqi Reference Citation Style (IQRC)**
> **Abbreviation: IQRC**
> **Developer: Dr. Talal Nadhim Azzuhairi 2026**

II.2. Core Principles of IQRC

Principle 1 — Full Name in Footnotes and Reference List

The author's full name — first name, father's name, and family name or title — is written in footnotes and reference list, because the three-part Arabic name represents a complete identity that cannot be reduced.

Principle 2 — Condensed In-Text Citation

A condensed citation in square brackets [ ] is used within the text, containing the author's identifier and the year of publication, with a page number for direct quotations.

Principle 3 — The Visible Name Principle for Female Authors

The problem in traditional citation styles (APA, Chicago, Harvard) is that only the family name is used within the text. In the Arabic context a woman's family name is usually her father's or husband's name causing female researchers to disappear behind a masculine identity.

> Rule: The female author appears in-text by her first name plus family name making her identity visible in the academic text. The male author uses only the family name following the traditional format.
>
> **Male: [Azzuhairi: 2021] Female: [Fatima Al-Qaisi: 2021]**

This distinction applies only in one position — the in-text citation. In the reference list and footnotes male and female authors follow exactly the same rules.

Principle 4 — Period as Element Separator

Citation elements in footnotes and reference list are separated by a period (.) rather than a semicolon, which aligns with punctuation rules in Arabic writing.

Principle 5 — Alphabetical Order in Reference List

The reference list is arranged alphabetically by family name using Arabic letters. Arabic sources are placed before foreign ones, either in two separate lists or one merged list at the researcher's discretion.

II.3. Citation Structure at the Three Levels

A. In-Text Citation

General format — Male	[Family name: Year of Publication]
General format — Female	[First Name + Family Name: Year of Publication]
With page number — Male	[Family Name: Year, p. Number]
With page number — Female	[First Name + Family Name: Year, p. Number]
Two authors — Male	[Family 1 & Family 2: Year]
Male + Female author	[Male Family & Female FirstName+Family: Year]
Three or more authors	[First Family et al.: Year]
Institutional author	[Institution Name: Year]

B. Footnote

Order	First Name, Father's Name, Family Name. Year. Title. Publication details. Page.
Separator between elements	Period (.)

Page reference	p. + number Example: p.15 or pp. 12–13
Reference to immediately preceding source	Ibid., p. + number
Reference to a non-adjacent previous source	Family name (for male) or First Name + Family name (for female), op. cit., p. + number

C. Reference List

Order	Family name first, then comma, then First Name and Father's Name. Year.
Separator between elements	Period (.) after each main element
Total pages	Total number of pages listed at end of entry: 325 pp.
Alphabetical order	By first letter of family name
Two sources by same author in same year	Add letter a and b after the year: 2021a and 2021b

II.4. Citation Rules by Source Type

1. Book

Position	Format	Example — Male	Example — Female
In-Text	[Name & Family: Year] or [Family: Year]	**[Azzuhairi: 2021]**	**[Rawan Azzuhairi: 2021]**
Footnote	Full Name. Year. Title. Ed. if applicable. City: Publisher. p. No.	**Talal Nadhim Azzuhairi. 2021. Book Title. Baghdad: Dar Al-Hurriya. p.45.**	**Rawan Talal Azzuhairi. 2021. Book Title. Baghdad: Dar Al-Hurriya. p.45.**

Position	Format	Example — Male	Example — Female
Reference List	Family, First Father Year. Title. Ed. City: Publisher. Total pp.	**Azzuhairi, Talal Nadhim 2021. Book Title. Baghdad: Dar Al-Hurriya. 345 pp.**	**Azzuhairi, Rawan Talal 2021. Book Title. Baghdad: Dar Al-Hurriya. 280 pp.**

2. Journal Article

Position	Format	Example — Male	Example — Female
In-Text	[Family/Female: Year, p. No.]	**[Azzuhairi: 2022, p.45]**	**[Rawan Azzuhairi: 2022, p.45]**
Footnote	Full Name. Year. Article Title. Journal Name, Vol. X, No. X, pp. X–X.	**Talal Nadhim Azzuhairi. 2022. Article Title. Journal of Studies, Vol.10, No.2, pp.38–56.**	**Rawan Yusuf Azzuhairi. 2022. Article Title. Journal of Studies, Vol.10, No.2, pp.38–56.**
Reference List	Family, First Name. Year. Article Title. Journal Name, Vol. X, No. X, pp. X–X. [DOI if available]	**Azzuhairi, Talal Nadhim 2022. Article Title. Journal of Studies, Vol.10, No.2, pp.38–56.**	**Azzuhairi, Rawan Yusuf 2022. Article Title. Journal of Studies, Vol.10, No.2, pp.38–56.**

3. Newspaper Article

Position	Format	Example — Male	Example — Female
In-Text	[Family/Female: Year]	**[Al-Jabiri: 2023]**	**[Suaad Al-Jabiri: 2023]**
Footnote	Full Name. Year, Date. Article Title. Newspaper Name. p. No.	**Suaad Mohammed Al-Jabiri. 2023, 15 March. Article Title. Al-Sabah Newspaper. p.7.**	**Suaad Mohammed Al-Jabiri. 2023, 15 March. Article Title. Al-Sabah Newspaper. p.7.**
Reference List	Family, Name Year, Date. Article Title. Newspaper Name, p. No.	**Al-Jabiri, Suaad Mohammed 2023, 15 March. Article Title. Al-Sabah Newspaper, p.7.**	**Al-Jabiri, Suaad Mohammed 2023, 15 March. Article Title. Al-Sabah Newspaper, p.7.**

4. Theses and Dissertations (MA / PhD)

Position	Format	Example — Male	Example — Female
In-Text	[Family/Female: Year, p. No.]	**[Al-Rawi: 2018, p.110]**	**[Zainab Al-Rawi: 2018, p.110]**
Footnote	Full Name. Year. Title. Type of thesis, unpublished. College, University. p. No.	**Mahmoud Jasim Al-Rawi. 2018. Dissertation Title. Unpublished PhD Dissertation, College of Law, University of Mosul. p.110.**	**Zainab Jasim Al-Rawi. 2018. Dissertation Title. Unpublished PhD Dissertation, College of Law, University of Mosul. p.110.**
Reference List	Family, First Name Year. Title. Type of thesis. College, University. Total pp.	**Al-Rawi, Mahmoud Jasim 2018. Dissertation Title. Unpublished PhD Dissertation, College of Law, University of Mosul. 320 pp.**	**Al-Rawi, Zainab Jasim 2018. Dissertation Title. Unpublished PhD Dissertation, College of Law, University of Mosul. 320 pp.**

5. Chapter in an Edited Book

Position	Format	Example — Male	Example — Female
In-Text	[Family/Female: Year, p. No.]	**[Al-Ubaidi: 2021, p.28]**	**[Zahraa Al-Ubaidi: 2021, p.28]**
Footnote	Full Name. Year. Chapter Title. In: Editor Name (Ed.). Book Title. City: Publisher. pp. range.	**Karim Salem Al-Ubaidi. 2021. Chapter Title. In: Talal Nadhim Azzuhairi (Ed.). Book Title. Baghdad: Dar Al-Hurriya. pp.10–45.**	**Zahraa Salem Al-Ubaidi. 2021. Chapter Title. In: Talal Nadhim Azzuhairi (Ed.). Book Title. Baghdad: Dar Al-Hurriya. pp.10–45.**
Reference List	Family, First Name Year. Chapter Title. In: Editor (Ed.). Book Title. City: Publisher. pp. range.	**Al-Ubaidi, Karim Salem 2021. Chapter Title. In: Azzuhairi, Talal Nadhim (Ed.).**	**Al-Ubaidi, Zahraa Salem 2021. Chapter Title. In: Azzuhairi, Talal Nadhim (Ed.). Book Title. Baghdad:**

Position	Format	Example — Male	Example — Female
		Book Title. Baghdad: Dar Al-Hurriya. pp.10–45.	**Dar Al-Hurriya. pp.10–45.**

6. Electronic Sources

Position	Format	Example — Male	Example — Female
In-Text	[Family/Institution/Female: Year]	**[Ministry of Education: 2023]**	**[Ministry of Education: 2023]**
Footnote	Full Name or Institution Name. Year. Title. Retrieved on [date] from: [URL].	**Ministry of Higher Education. 2023. Page Title. Retrieved on 10 January 2024 from: https://mohesr.gov.iq**	**Ministry of Higher Education. 2023. Page Title. Retrieved on 10 January 2024 from: https://mohesr.gov.iq**
Reference List	Family/Institution Year. Title. Retrieved on [date] from: [URL].	**Ministry of Higher Education 2023. Page Title. Retrieved on 10 January 2024 from: https://mohesr.gov.iq**	**Ministry of Higher Education 2023. Page Title. Retrieved on 10 January 2024 from: https://mohesr.gov.iq**

7. Conference Papers

Position	Format	Example — Male	Example — Female
In-Text	[Family/Female: Year, p. No.]	**[Al-Shammari: 2021, p.92]**	**[Fatima Al-Shammari: 2021, p.92]**
Footnote	Full Name. Year. Paper Title. In: Proceedings of Conference Name, Location, Date. pp. range.	**Fatima Jasim Al-Shammari. 2021. Paper Title. In: Proceedings of the International Conference, University of Baghdad, 4–5 May 2021. pp.85–100.**	**Fatima Jasim Al-Shammari. 2021. Paper Title. In: Proceedings of the International Conference, University of Baghdad, 4–5 May 2021. pp.85–100.**

Position	Format	Example — Male	Example — Female
Reference List	Family, First Name Year. Paper Title. In: Conference Proceedings. Location, Date. pp. range.	**Al-Shammari, Fatima Jasim 2021. Paper Title. In: International Conference Proceedings. University of Baghdad, 4–5 May 2021. pp.85–100.**	**Al-Shammari, Fatima Jasim 2021. Paper Title. In: International Conference Proceedings. University of Baghdad, 4–5 May 2021. pp.85–100.**

8. Laws and Legislation

Position	Format	Example — Male	Example — Female
In-Text	[Law Name, Article: Year]	**[Iraqi Labour Law, Article: 23, 2015]**	**[Iraqi Labour Law, Article: 23, 2015]**
Footnote	Law Name and Number. Year. Article. Official Gazette Name, Issue No. X.	**Iraqi Labour Law No. 37. 2015. Article 23. Iraqi Official Gazette, Issue 4353.**	**Iraqi Labour Law No. 37. 2015. Article 23. Iraqi Official Gazette, Issue 4353.**
Reference List	Law Name and Number Year. Article. Gazette Name, Issue No.	**Iraqi Labour Law No. 37 2015. Article 23. Iraqi Official Gazette, Issue 4353.**	**Iraqi Labour Law No. 37 2015. Article 23. Iraqi Official Gazette, Issue 4353.**

9. Official and Institutional Reports

Position	Format	Example — Male	Example — Female
In-Text	[Institution/Family/Female: Year, p. No.]	**[UNESCO: 2022, p.18]**	**[UNESCO: 2022, p.18]**
Footnote	Institution Name or Full Name. Year. Report Title. City: Publishing Institution. p. No.	**UNESCO Organization. 2022. Report Title. Paris: UNESCO. p.18.**	**UNESCO Organization. 2022. Report Title. Paris: UNESCO. p.18.**
Reference List	Institution or Family Year. Report Title. City: Publishing Institution. Total pp.	**UNESCO Organization 2022. Report Title. Paris: UNESCO. 98 pp.**	**UNESCO Organization 2022. Report Title. Paris: UNESCO. 98 pp.**

II.5. Special Cases and How to Handle Them

Case	In-Text Citation	Note
Name shared by male and female (e.g., Sabah, Salam, Nour)	Apply the rule of the specified gender — gender must be determined manually	Gender is not assumed automatically; failure to specify is considered a methodological error
Pen name / artistic name (e.g., Bint Al-Shati', Umm Kulthum)	Use the pen name as-is, without inverting it and without adding a first name	The pen name is the person's established cognitive identity
Female + Male author in same work	[Rawan Azzuhairi & Al-Rawi: 2021]	Female's full first name is used; male's family name only
Two or more female authors	[Rawan Azzuhairi & Fatima Al-Shammari: 2021]	All female authors appear with their first names
One author, two sources in same year	[Azzuhairi: 2021a] and [Azzuhairi: 2021b]	Add a and b after the year in both reference list and in-text citation
Institutional author	[Ministry of Education: 2023]	Gender rule does not apply to institutional authors
Translated book	[Huntington: 1996]	Translator's name is listed in reference list: Trans.: Full Name
No publication date	[Azzuhairi: n.d.]	n.d. = no date
Classical heritage book (no date)	[Ibn Khaldun: n.d., p.210]	Listed before other sources in reference list
Quranic verse	Surah Al-Baqara: 286	The Quran is listed first in the reference list without a year

II.6. Comprehensive Comparative Table

The following table presents the basic format for all source types at the three levels:

Source Type	In-Text Citation	Reference List (Short Format)
Book — Male	[Azzuhairi: 2021]	Azzuhairi, Talal Nadhim 2021. Title. City: Publisher. pp.
Book — Female	[Rawan Azzuhairi: 2021]	Azzuhairi, Rawan Yusuf Talal 2021. Title. City: Publisher. pp.
Book — Two authors	[Azzuhairi & Al-Ubaidi: 2021]	Azzuhairi, Talal & Al-Ubaidi, Karim 2021. Title.
Book — Three or more	[Azzuhairi et al.: 2021]	Azzuhairi, Talal et al. 2021. Title.
Book — Edited	[Azzuhairi (Ed.): 2021]	Azzuhairi, Talal Nadhim (Ed.) 2021. Title.
Book — Translated	[Huntington: 1996]	Huntington, Samuel 1996. Title. Trans.: Full Name.
Book chapter	[Al-Ubaidi: 2021]	Al-Ubaidi, Karim 2021. Chapter. In: Editor. Book. Publisher. pp.
Journal article	[Azzuhairi: 2022]	Azzuhairi, Talal 2022. Title. Journal, Vol., No., pp.
Newspaper article	[Al-Jabiri: 2023]	Al-Jabiri, Suaad 2023, 15 March. Title. Newspaper, p.
MA Thesis	[Hassan: 2020]	Hassan, Ahmad Ali 2020. Title. MA Thesis, College, University.
PhD Dissertation	[Al-Rawi: 2018]	Al-Rawi, Mahmoud 2018. Title. PhD Dissertation, College, University.
Website	[Ministry of Education: 2023]	Institution 2023. Title. Retrieved on [date] from: URL.
Conference paper	[Al-Shammari: 2021]	Al-Shammari, Fatima 2021. Paper. In: Conference Proceedings. pp.
Law / Legislation	[Labour Law: 2015]	Law Name and Number 2015. Article. Gazette, Issue No.
Official report	[UNESCO: 2022]	UNESCO 2022. Title. City: Institution. pp.

Source Type	In-Text Citation	Reference List (Short Format)
Quranic verse	Surah Al-Baqara: 286	The Holy Quran. First in list, no year.
Classical heritage book	[Ibn Khaldun: n.d.]	Ibn Khaldun n.d. Al-Muqaddima. City: Publisher.

II.7. Comparison of IQRC with International Styles

Feature	APA / Chicago / Harvard	IQRC
In-text citation	Family name only	Family name for male; First Name + Family name for female
Female author identity	Hidden behind masculine family name	Visible — her personal name is seen in the academic text
Arabic name structure	Binary (first name – family name) not respected	Triple/quadruple structure respected: First + Father + Family
Element separator	Semicolon or comma	Period (.) — consistent with Arabic punctuation
Reference list order	Alphabetical by family name	Alphabetical by family name — Arabic sources first
Electronic sources	Retrieval date mentioned	Retrieval date required
Laws and legislation	Inconsistent handling	Unified rule using official law name
Quran and heritage sources	Not covered	Included with special format at beginning of list

II.8. IQRC Citation Generator Tool

A companion electronic tool for the IQRC style has been developed. It runs directly in a web browser without needing to install any software. The tool generates the complete citation in all three levels as soon as source data is entered.

Tool Name	Comprehensive Arabic Reference Citation Generator
Source Types	10 types: Book — Journal — Newspaper — MA Thesis — PhD Dissertation — Book Chapter — Website — Conference — Law — Report
Outputs	Three formats for each source: In-text citation, Footnote, Reference List
	Two expressive icons (male head / female head) — selecting one changes the generate button and automatically adjusts the visible name rule
Generate Button	Changes color and icon based on selected gender: blue for male, dark red for female
Copy	Instant copy button next to each format — supports clipboard in all browsers
Technology	Pure HTML + CSS + JavaScript — works offline after downloading the file
Development	Dr. Talal Nadhim Azzuhairi © 2026

III. Development Stages of the Iraqi Reference Citation Generator Tool

III.1. Languages and Technologies Used

The tool was built using three core web technologies in a single, standalone file that does not require a server or internet connection after downloading: HTML for building the interface structure and its elements, including buttons, input fields, and results display areas; CSS for formatting the interface, managing colors and fonts, and ensuring responsiveness across different screen sizes; and JavaScript for managing the entire operational logic, from dynamically building fields and applying gender rules to generating citation formats and copying operations. The

fonts used are Amiri for official Arabic texts and Tajawal for interface elements, both sourced from Google Fonts.

III.2. Tool Structure and Implementation Steps:

Step 1: Defining Source Types and Fields

The tool contains ten source types defined in a static array named SOURCE_TYPES: book, journal article, newspaper article, master's thesis, doctoral dissertation, book chapter, website, conference paper, law/legislation, and official report. Each type has a set of custom fields defined in a FIELDS object, including mandatory and optional fields, including a special field with the identifier GENDER used to determine the position of the gender selection element in the field sequence.

Step 2: Initializing the Interface at Run

When the page loads, the init() function is automatically called and performs two steps: it calls renderTabs() to draw the source type buttons in the tab bar, and then it calls renderFields() to draw the input fields for the default type, which is Book. As shown in Figure**:(1)**

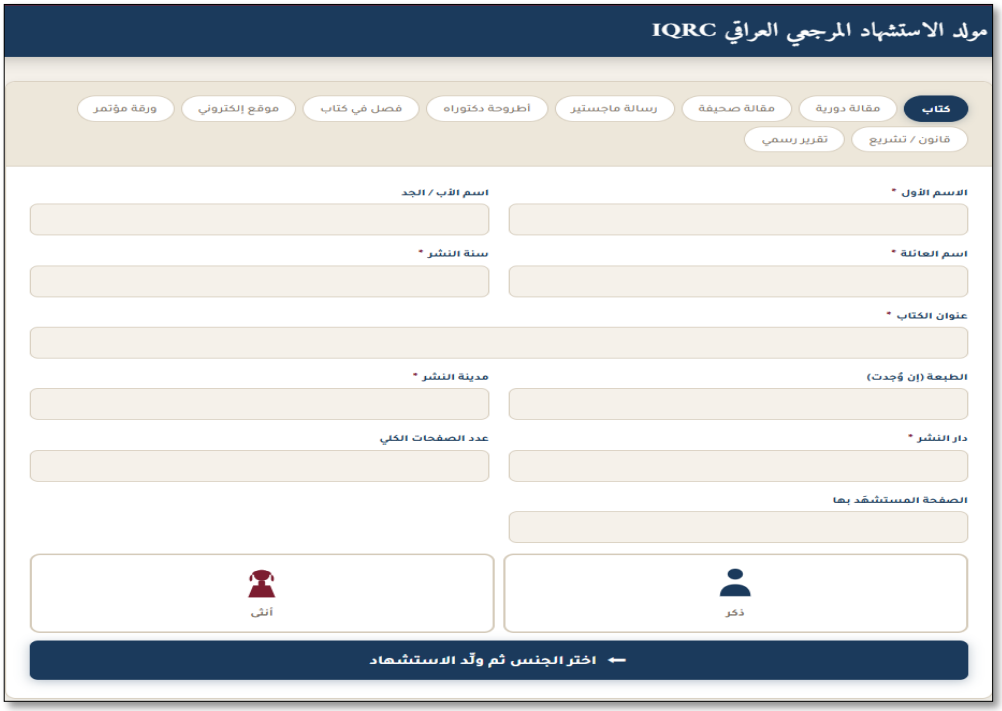


Figure (1) Main interface of the tool

Step 3: Selecting the Source Type

When the user clicks on any tab, the selectType() function is called, which updates the application state (state.type), redraws the tabs highlighting the selected type, rebuilds the appropriate fields for this type, resets the gender field and checkmarks, and returns the results area to its empty state. As shown in Figure(2)



Figure (2) Selecting the type of cited source

Step 4: Entering Source Data

The renderFields() function dynamically creates input fields based on the FIELDS definitions of the selected type, ignoring the dummy GENDER field because the gender selection element is always off-grid. Mandatory fields are marked with a red asterisk. Each field is associated with the oninput event, which updates state.fields immediately upon writing. As shown in Figure(3)



Figure (3) Data Field Interface for Each Source

Step 5: Determining the Author's Gender

This step is the core of the tool and its fundamental principle. The user is presented with two expressive icons: one representing a male author in dark blue, and the other representing a female author in dark red. Clicking on either icon invokes the setGender() function, which adds a checkmark to the selected icon and changes the color, text, and symbol of the generate button to reflect the specified gender; it becomes blue with the male symbol or dark red with the female symbol, as shown in Figure.(4)



Figure (4) Author Gender Selection Stage

Step 6: Citation Generation and Application of Gender Equity

When the generate button is clicked, the generate() function is called, which gathers field data via getF(), and then calls buildCitation() to construct the three formats. The construction process relies on three helper functions:

The fullName() function constructs the author's full name in the format: first name + middle name + last name, and is used in footnotes. The listName() function constructs the name in the format of reference lists: last name, first name, and middle name. The core function inTextName() embodies the gender equity principle, as it returns only the last name if the author is male, according to the traditional format, while it returns the first name followed by the last name if the author is female, to highlight her gender identity in the academic text. The `buildCitation()` function then determines the full citation format for each source type according to the IQRC style rules.

Step 7: Displaying the Results

The results appear in three distinct color-coded visual blocks: the in-text tag with a dark blue background, the footnote with a green background, and the bibliography with a dark red background. When a female source is selected, her first name appears within the in-text tag, highlighted in light yellow and bold to emphasize her visual presence in the citation, as shown in Figure (5.)



Figure (5) Outcome templates for each citation block

Step 8: Copying the result

Next to each citation block is a button for instant copying that calls the `copyText()` function. The function initially uses `navigator.clipboard.writeText()`, which is the

modern method. If this fails, it automatically switches to the backup method by creating a temporary text element and using `execCommand('copy')`. Upon successful copying, the button text changes to a "✓ Copy" checkmark, and a small notification bar appears at the bottom of the screen for two seconds to confirm the copying process before disappearing.

VI. Discussion and Conclusions

The tool's workflow can be summarized in seven sequential procedural steps, reflecting a design logic based on simplifying complexity and reducing the cognitive load on the user. These steps are: opening the tool → selecting the source type → entering data → specifying the gender → clicking the generate button → displaying the three formats → copying the desired citation. It is worth noting that this sequence was not arbitrary but rather the result of a critical review of similar tool interfaces, which often lack procedural clarity, hindering their adoption in Arab academic environments. To verify the effectiveness of the performance and the accuracy of the outputs, the tool underwent real-world field testing using diverse information sources after its publication on the open digital repository GitHub and its availability to users via a direct link under the name "Iraqi Citation Generator." Publishing on an open-source platform is a deliberate and systematic step, as it allows researchers to review the source code and contribute to its development, thus lending the tool an air of scientific transparency and enhancing its verifiability and reproducibility.

Based on the results of the test across the three citation levels, it is clear that the tool successfully overcomes the structural problems inherent in international citation methods when applied to Arabic names. These problems primarily manifest in the failure to distinguish between first and last names and the neglect of the cultural context of Arabic name structures. Furthermore, the tool achieves gender equity by adopting an explicit mechanism to differentiate between male and female authors at the citation level. This is a requirement entirely absent in prevailing international methods and represents a significant addition to the Arab academic documentation system. Regarding user experience, the tool's design is based on established usability principles in human-computer interface design. It is designed to accommodate users with varying levels of technical expertise and to meet the requirements of multiple display devices, thus ensuring accessibility for the widest

possible segment of the academic community without requiring prior technical proficiency.

Recommendations

In light of the study's findings, the following recommendations can be formulated:

1. The study recommends that Iraqi and Arab universities and scientific research centers consider adopting the IQRC style as an official standard for academic citation, especially given the absence of any unified Arab standard to date, and that peer-reviewed scientific journals incorporate it into their publication guidelines.
2. The study recommends conducting independent evaluation studies to measure user satisfaction among researchers and students with the tool, and to assess its actual impact on reducing citation errors compared to international methods within the Iraqi academic environment.
3. We call for the development of software plugins that allow the integration of the tool with common reference management programs such as Zotero and Mendeley, as well as the development of a version for word processing environments such as Microsoft Word, which would enhance ease of use in direct academic writing.
4. The study recommends striving to develop adapted versions of the style that suit the specific characteristics of Arab countries, as a prelude to introducing a unified Arab standard that preserves linguistic and cultural identity and meets international publishing requirements.

AI Usage Disclosure Statement

ChatGPT was used for linguistic editing and refinement of the manuscript to enhance clarity and academic language quality. Claude AI was used to review the source code, improve code structure and quality, and enhance the user experience (UX) of the developed tool. All conceptual design, methodological decisions, and final content remain the responsibility of the author.

References

1. *GOST*. (2026, 2 20). Retrieved from ar.wikipedia: https://ar.wikipedia.org/wiki/%D9%85%D8%B9%D8%A7%D9%8A%D9%8A%D8%B1_GOST

2. *Chicago-Style Citation Quick Guide*. (2026, 2 20). Retrieved from The Chicago Manual of Style Online: https://www.chicagomanualofstyle.org/tools_citationguide.html

3. FUADAH, N. (2024). *HARVARD STYLE FORMAT.* MAROS: MUSLIM UNIVERSITY OF .

4. Garfield, E. (1955). Citation indexes for science: a new dimension in documentation through association of ideas. . *Science,*, 108-111.

5. Garfield, E. (2007). The evolution of the science citation index.. *International microbiology, 10*(1), 65-69. Retrieved 2 22, 2026, from https://revistes.iec.cat/index.php/IM/article/download/4c457c9c22c49.002/9598acessado

6. *GB/T 7714 Citation Style*. (2026, 2 20). Retrieved from DeepWiki: https://deepwiki.com/haimingz/tjuthesis/5.2-gbt-7714-citation-style

7. ILHAM, M. (2024). *MLA STYLE FORMAT.* MAROS: MUSLIM UNIVERSITY OF MAROS.

8. RAHMAT, F. D. (2024). *APA STYLE FORMAT.* MUSLIM UNIVERSITY OF MAROS. Retrieved 3 1, 2026, from https://www.researchgate.net/profile/Ferdania-Maulita-Rahmat/publication/387423570_APA_STYLE_FORMAT/links/676d10d8117f340ec3d90d27/APA-STYLE-FORMAT.pdf