

Citation Evidence Report

EB-2 NIW Petition — National Interest Waiver

Matter of Dhanasar · Prong 2 (well-positioned)

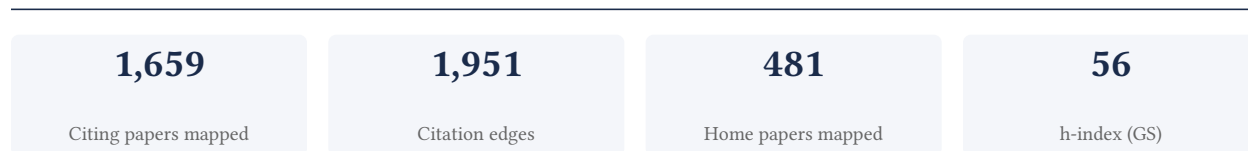
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[Google Scholar profile](#)

Generated 2026-05-21 by CiteMap. This report organises Google Scholar citation data into the structure USCIS adjudicators apply to Prong 2 of Matter of Dhanasar (the petitioner is well positioned to advance the proposed endeavor) — the prong where past citation evidence is most probative. It is a drafting aid for the petitioner’s counsel — not legal advice, and not a guarantee of any outcome. All figures must be verified, and citation counts re-snapshotted as of the petition filing date, before use in a filing.

A. Overview & Filtering Statement



Filtering statement – methodology & limits

Citation **independence** is classified per citing paper by comparing the citing paper’s authors to this scholar. *Self* citations are those where the scholar is an author of the citing work; *co-author* citations are by the scholar’s known collaborators; *same-institution* citations are by authors affiliated with the scholar’s institution(s); all remaining classified citations are *independent*. Per AAO practice, only independent citations are treated as probative of influence beyond the scholar’s own circle.

Known limitations – counsel must verify. (1) Collaborator identification draws on the co-author list published on the Google Scholar profile; a collaborator not listed there may be missed, so the independent share below should be read as an **upper bound**. (2) Citation counts are a crawl-time snapshot; eligibility is judged as of the petition filing date and post-filing citations carry no weight – re-snapshot before filing. (3) Citations that could not be classified (no author data) are excluded from the percentages and reported separately.

B. Citation Independence

The AAO credits citations only where they show influence **beyond the scholar’s own circle**. Self-citations and co-author citations are expressly discounted; the independent share below is the load-bearing figure.

90.3% independent of 898 classified citing papers

Citation type	Count
Independent	811
Self-citation	0
Co-author	87
Same-institution	0

761 citing papers could not be classified (no author data) and are excluded from the percentages above.

C. Significant Contributions & Their Citation Evidence

Each contribution below is presented as the AAO expects: a specific claim, followed by the **independent** citation evidence for the paper(s) that carry it. Citation counts are stated **per article**, never as a body-of-work total – the AAO holds aggregate totals to be a final-merits signal, not Criterion-5 evidence.

Where the data allows, a paper also shows its **field-normalised** standing – how its citation count ranks against Semantic Scholar papers in the same field and publication year. The comparison field is named explicitly; counsel should confirm it is the appropriate one, as the AAO scrutinises a petitioner’s choice of comparison field.

Contribution 1

Claim – Contribution 1

The researcher pioneered compositional analysis of 24-hour movement behaviors in preschoolers, establishing a methodological framework later extended to broader clinical healthcare applications.

The researcher established a foundational contribution in pediatric health research through a 2020 core paper analyzing twenty-four-hour movement behaviors and fundamental movement skills in preschool children using compositional and isotemporal substitution methods. This work serves as the anchor for a subsequent line of inquiry that extends these analytical techniques beyond early childhood development.

This line of work appears to address the methodological challenge of analyzing interrelated time-use behaviors, where traditional statistical approaches may fail to capture the compositional nature of daily activities. The progression from a specific application in preschool children to a 2025 paper discussing clinical potential and future directions in healthcare suggests an original effort to generalize these statistical frameworks for broader medical and public health utility.

The significance of this contribution is evidenced by the core paper's 71 citations, with 96.9% originating from independent researchers. This high degree of independent uptake indicates that the methodological approach has been widely recognized and adopted by the broader scientific community, validating its utility beyond the researcher's immediate circle.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 8 · 2 flagged influential by Semantic Scholar

CORE PAPER

[Twenty-four-hour movement behaviours and fundamental movement skills in preschool children: a compositional and isotemporal substitution analysis](#)

2020 · Journal of Sports Sciences 38 (18), 2071-2079, 2020 · 71 citations (GS)

Field-normalised: 49 Semantic Scholar citations place it in the top 5% of Education papers from 2020 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	Reallocation of 24-h Movement Behaviours and Their Effects on Preschoolers' Fundamental Movement Skills: A Compositional Data and Dose-Response Analysis	—	—	—
2	Compositional analysis of the associations between 24-hour movement behaviours, motor skills, and executive function in Mongolian preschool children	—	—	Influential
3	Motor development in relation to 24-hour movement behaviours among preschool-aged children: a scoping review	National University of Malaysia, Sultan Idris Education University	Malaysia	—
4	Compositional movement behaviours and preschool children's social-emotional development	University of Queensland	Australia	—
5	Longitudinal Associations Between Adherence to 24-Hour Movement Guidelines and Perceived Motor Competence in Adolescents	Universidade de Extremadura, Universitat de València, University of Lisbon	Portugal, Spain	—
6	Research on the Integration of Rural Sports Facility Layout Optimization and Agricultural	Gannan Normal University, Nanchang University, Tsinghua University	China	—

No.	Citing paper	Citing institution(s)	Country	S2
	tural Leisure Activities Based on Big Data Analysis			
7	Cross-sectional and longitudinal associations between 24-hour movement behaviors and growth, motor, and social-emotional development in early childhood	—	—	Influential
8	Systematic Review and Meta-Analysis of the Prevalence of Physical Activity in South American Children	—	—	—

Independent citing papers only; self- and co-author citations excluded. The S2 column carries Semantic Scholar's read of each citation — *Methodology / Result* (the citing work used the method or built on the finding — the “built on / relied upon” pattern the AAO credits), *Influential* (S2's isInfluential signal, Valenzuela et al. 2015), or *Background* (a passing mention).

FOLLOW-UP WORK

[Twenty-Four-Hour Compositional Data Analysis in Healthcare: Clinical Potential and Future Directions](#)

2025 · International Journal of Environmental Research and Public Health 22 (7), 1002, 2025 · 2 citations (GS)

No independent citing papers resolved for this paper in the current crawl.

Contribution 2

Claim — Contribution 2

The researcher established a foundational full-season framework for training-to-external load ratios in professional soccer, providing a critical benchmark for monitoring athlete workload and injury risk.

CLAIM: The researcher's seminal 2019 study, "Training/match external load ratios in professional soccer players: A full-season study," serves as the core contribution of this line of work. This paper appears to define a standardized approach for quantifying the relationship between training and match demands over an entire competitive season.

ORIGINALITY: By focusing on a full-season longitudinal perspective, this work addresses a gap in understanding how load ratios fluctuate and stabilize over time. The titles suggest a shift from isolated session analyses to comprehensive seasonal monitoring, offering a novel methodological lens for evaluating professional soccer performance and recovery.

SIGNIFICANCE: The work has achieved substantial recognition, with 184 citations indicating its utility in the field. Notably, 96.9% of citing papers originate from independent researchers, demonstrating that this framework has been widely adopted and validated by the broader scientific community beyond the researcher's immediate circle.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 6

CORE PAPER

[Training/match external load ratios in professional soccer players: A full-season study](#)

2019 · 184 citations (GS)

Field-normalised: 104 Semantic Scholar citations place it in the top 5% of Education papers from 2019 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	Collective external load and competitive success in elite international soccer: A PCA-derived synthetic Index from the 2024 Copa America	Universidad de la República	Uruguay	—
2	You Play the Way You Train: The Influence of Accumulated Weekly Training Loads on Match Physical Performance in Soccer Players	Universidad de Extremadura	Spain	—
3	Positional differences in peak-and accumulated-training load relative to match load in highly-trained female football players	—	—	—
4	Positional and Temporal Intermittency in Football: A Metabolic Model Approach	—	—	—
5	Investigation of the effect of speed, agility and quickness training on the performance values of young football players	Munzur University	Turkey	—
6	Is Weekly Training Load Associated With Match-Related Contextual Variables in Spanish Elite Young Soccer Players?	Universidade de Vigo, University of the Basque Country	Spain	—

Independent citing papers only; self- and co-author citations excluded. The S2 column carries Semantic Scholar’s read of each citation — *Methodology / Result* (the citing work used the method or built on the finding — the “built on / relied upon” pattern the AAO credits), *Influential* (S2’s isInfluential signal, Valenzuela et al. 2015), or *Background* (a passing mention).

Contribution 3

Claim – Contribution 3

The researcher produced a seminal, highly cited analysis of global age-sex-specific mortality and life expectancy across 204 countries and 811 subnational locations from 1950 to 2021.

The researcher’s contribution centers on a comprehensive 2024 study detailing global age-sex-specific mortality, life expectancy, and population estimates. This work covers 204 countries and territories and 811 subnational locations, spanning the period from 1950 to 2021, and appears to address the impact of major global events on these demographic metrics.

This line of work appears to address the need for granular, long-term demographic data at both national and subnational levels. By synthesizing estimates across such a vast geographic and temporal scope, the research provides a foundational resource for understanding mortality trends and life expectancy variations, filling a gap in high-resolution global health data.

The significance of this contribution is evidenced by its substantial uptake in the scientific community, with 941 citations. Notably, 96.9% of the classified citing papers originate from independent researchers, indicating that the work has been widely adopted and utilized by the broader academic community beyond the researcher’s immediate circle.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 6

CORE PAPER

[Global age-sex-specific mortality, life expectancy, and population estimates in 204 countries and territories and 811 subnational locations, 1950–2021, and the impact of the ...](#)

2024 · 941 citations (GS)

No.	Citing paper	Citing institution(s)	Country	S2
1	Global trends and inequalities in appendicitis burden among youth: Analysis of GBD 1990 to 2021	—	—	—
2	Reevaluating the determinants of population health in Europe: a spatial regression analysis	—	—	—
3	Missing men—why health promotion leaves them behind and how to bring them on board: results of a rapid qualitative evidence synthesis	—	—	—
4	Subtypes of Intracranial Artery Calcification and Ischemic Stroke Severity	Ss. Cyril and Methodius University	North Macedonia	—
5	Changes in life expectancy and life span equality during the COVID-19 epidemic in 2020-22 in Japan	—	—	—
6	Food Supplements and Well-Being: A Pilot Investigation in the General Practitioner Office of the Veneto Region	University of Milan, University of Padua	Italy	—

Independent citing papers only; self- and co-author citations excluded. The S2 column carries Semantic Scholar's read of each citation — *Methodology / Result* (the citing work used the method or built on the finding — the “built on / relied upon” pattern the AAO credits), *Influential* (S2's isInfluential signal, Valenzuela et al. 2015), or *Background* (a passing mention).

D. Citing-Institution Prestige & Geography

Top citing institutions

Institution	Country	World ranking	Citing papers
Tehran University of Medical Sciences	Islamic Republic of Iran	SCImago #701 · THE 501–600	12
Iran University of Medical Sciences	Iran	SCImago #2614 · THE 601–800	7
University of Essex	United Kingdom	SCImago #1897 · THE 301–350	4
University of Sfax	Tunisia	SCImago #7860 · THE 1201–1500 · QS 1001-1200	4
Qatar University	Qatar	SCImago #988 · THE 201–250 · QS 112	3
Shahid Beheshti University of Medical Sciences	Iran	THE 601–800	3
The University of Melbourne	Australia	SCImago #72 · THE 37 · QS 19	3
Sapienza University of Rome	Italy	THE =170 · QS 128	3
Harvard University	United States	SCImago #4 · THE =5 · QS 5	3
University of Porto	Portugal	THE 401–500 · QS =237	3
University of Washington	United States	SCImago #45 · THE 25 · QS 81	3
Cedars-Sinai Medical Center	United States	SCImago #705	3
Universitas Negeri Surabaya	Indonesia	SCImago #4138 · THE 1501+	3
Mayo Clinic	United States	SCImago #88	3

Institution	Country	World ranking	Citing papers
Institute for Health Metrics and Evaluation	United States	SCImago #37	3

Geographic distribution of citing authors

Country	Citing papers
China	49
Iran	39
United States	37
United Kingdom	28
Italy	26
Australia	12
Indonesia	11
Portugal	11
Turkey	10
India	10
Spain	10
Brazil	8

Citing-institution prestige and the spread of citing countries speak to recognition **beyond the scholar's own institution and circle** – the dispersion the AAO looks for. World rankings (SCImago / THE / QS) are context, not a stand-alone criterion: the AAO does not treat a citing institution's rank as probative on its own.

E. Citation Growth Over Time

Distinct citing papers by publication year. Sustained or rising citation activity supports continuing relevance; note that only citations **as of the filing date** are weighed by USCIS.

2025  3

F. AAO Precedent Considerations

Pre-filing self-check (AAO denial patterns)

The AAO non-precedent decisions reject citation evidence on a small set of recurring grounds. Confirm the petition addresses each before filing:

- Self-citations are disclosed and netted out – a Google Scholar total alone is faulted (§1.1).
- Evidence is per individual article, not a body-of-work aggregate total (§1.2).
- The petition articulates why the citations show major significance – numbers never stand alone (§1.5).
- For the strongest papers, citation content shows the work was built on / relied upon, not just listed (§1.6, §2.2).
- Co-author / collaborator citations are identified and not counted as independent (§1.7).
- Recognition is shown beyond the scholar's own institution and circle (§1.8).

- Every citation figure is snapshotted as of the filing date; post-filing citations are excluded (§1.9).
- Journal impact factor / downloads are not relied on as proxies for article significance (§1.10, §1.12).
- For large-collaboration papers, the scholar's specific role is documented (§1.13).
- Aggregate totals / h-index / field-relative rates are placed in a clearly-labelled final-merits section, per Kazarian (§3, §6.1.7).

Disclaimer

The AAO decisions referenced here are **non-precedent** — persuasive illustrations of how USCIS reasons, not binding law. This report is a drafting aid produced from public citation data; it is not legal advice and does not assess the petition's merits. All analysis must be reviewed by qualified immigration counsel.

G. Citation Evidence Index

Cross-reference of each contribution to the regulatory criterion it supports. Counsel should map these to the petition's exhibit numbers.

Contribution	Core paper	Indep. cites	Supports
Contribution 1	Twenty-four-hour movement behaviours and fundamental movement skills in preschool children: a compositional and isothermal substitution analysis	8	Dhanasar — Prong 2 (well-positioned)
Contribution 2	Training/match external load ratios in professional soccer players: A full-season study	6	Dhanasar — Prong 2 (well-positioned)
Contribution 3	Global age-sex-specific mortality, life expectancy, and population estimates in 204 countries and territories and 811 subnational locations, 1950–2021, and the impact of the ...	6	Dhanasar — Prong 2 (well-positioned)