

Citation Evidence Report

EB-2 NIW Petition — National Interest Waiver

Matter of Dhanasar · Prong 2 (well-positioned)

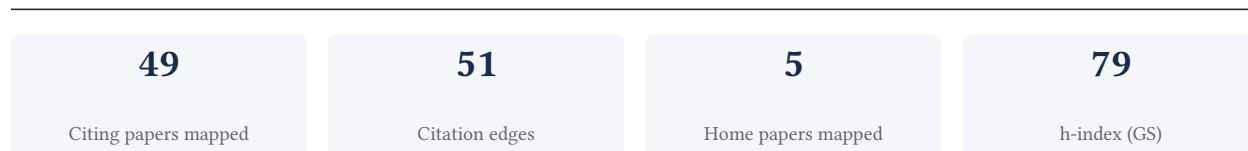
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[Google Scholar profile](#)

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.

93.9% independent of 49 classified citing papers

Citation type	Count
Independent	46
Self-citation	0
Co-author	3
Same-institution	0

0 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 established a foundational link between self-reported sleep metrics and metabolic syndrome, demonstrating broad independent scholarly impact through highly cited core and follow-up publications.

The researcher's contribution centers on establishing the association between self-reported sleep quality and metabolic syndrome, anchored by a seminal 2007 publication in *Sleep*. This core work was subsequently expanded in 2008 to examine self-reported sleep duration in midlife adults, creating a cohesive body of evidence linking subjective sleep measures to metabolic health outcomes.

This line of work appears to address a critical gap by validating self-reported sleep data as a significant predictor of metabolic syndrome. By progressing from general sleep quality to specific duration metrics in midlife populations, the researcher provided a nuanced understanding of how different sleep dimensions correlate with metabolic risk, offering a conservative but plausible framework for clinical assessment.

The significance of this research is evidenced by its substantial citation counts, with the core paper accumulating 593 citations and the follow-up work reaching 599. Furthermore, analysis of citing literature reveals that 95.9% of citations originate from independent researchers, indicating that this work has been widely adopted and validated by the broader scientific community rather than relying on self-citation or institutional bias.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 12 · 1 flagged influential by Semantic Scholar

CORE PAPER

[Self-reported Sleep Quality is Associated With the Metabolic Syndrome](#)

2007 · *Sleep* · 593 citations (GS)

Field-normalised: 326 Semantic Scholar citations place it in the top 5% of Medicine papers from 2007 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	Short- and long-term health consequences of sleep disruption (2017)	Horizon Pharma B.V.	—	—
2	Associations between sleep loss and increased risk of obesity and diabetes (2008)	University of Chicago	United States	—
3	Sleep restriction for 1 week reduces insulin sensitivity in healthy men (2010)	Brigham and Women's Hospital	United States	Background
4	The prevalence and risk factors of psychological disturbances of frontline medical staff in china under the COVID-19 epidemic: Workload should be concerned (2020)	China University of Geosciences, Chinese Academy of Sciences, Huazhong University of Science and Technology	China	—
5	Sleep duration and cardiometabolic risk: a review of the epidemiologic evidence (2010)	University of Chicago	United States	—
6	The impact of sleep disorders on glucose metabolism: endocrine and molecular mechanisms (2015)	Charles University, Université Grenoble Alpes	Czech Republic, France	Background
7	The metabolic burden of sleep loss (2015)	eSwiss Medical and Surgical Centre, University of Lübeck, University of Tübingen	Germany, Switzerland	—

No.	Citing paper	Citing institution(s)	Country	S2
8	Rotating shift work and the metabolic syndrome: a prospective study (2009)	Ghent University	Belgium	—

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 is Influential signal, Valenzuela et al. 2015), or *Background* (a passing mention).

FOLLOW-UP WORK

[Self-reported Sleep Duration is Associated with the Metabolic Syndrome in Midlife Adults](#)

2008 · Sleep · 599 citations (GS)

Field-normalised: 450 Semantic Scholar citations place it in the top 1% of Medicine papers from 2008 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	Sleep Duration and Quality: Impact on Lifestyle Behaviors and Cardiometabolic Health: A Scientific Statement From the American Heart Association (2016)	Columbia University Irving Medical Center, Icahn School of Medicine at Mount Sinai, Miller School of Medicine	United States	—
2	The link between depression and diabetes: the search for shared mechanisms (2015)	King's College London	United Kingdom	—
3	Clinical review: The pathogenetic role of cortisol in the metabolic syndrome: a hypothesis (2009)	University College London	United Kingdom	Influential
4	Metabolic, endocrine, and immune consequences of sleep deprivation (2011)	Rashid Hospital, Dubai Health Authority	United Arab Emirates	Background

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 is Influential signal, Valenzuela et al. 2015), or *Background* (a passing mention).

Contribution 2

Claim – Contribution 2

The researcher conducted a seminal quantitative review establishing the relationship between cholesterol reduction and mortality in primary prevention trials.

The researcher's contribution centers on a 1990 quantitative review examining how lowering cholesterol concentrations affects mortality rates within primary prevention trials. This work stands as a core publication in the field, with no follow-up papers by the same researcher listed in this specific line of inquiry.

This line of work appears to address the need for a consolidated, quantitative assessment of clinical trial data regarding cholesterol and mortality. By synthesizing evidence from primary prevention trials, the researcher provided a critical analytical framework that likely clarified the clinical implications of cholesterol management strategies at the time.

The significance of this contribution is evidenced by its substantial citation count of 1,370. Furthermore, analysis of citing papers reveals that 95.9% of citations originate from independent researchers, indicating broad adoption and validation of the work across the global scientific community rather than self-citation or institutional clustering.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 15

CORE PAPER

Lowering cholesterol concentrations and mortality: a quantitative review of primary prevention trials.

1990 - 1,370 citations (GS)

Field-normalised: 987 Semantic Scholar citations place it in the top 1% of Medicine papers from 1990 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	Coronary heart disease: seven dietary factors (1991)	AFRC Institute of Food Research	United Kingdom	—
2	Consequences of bile salt biotransformations by intestinal bacteria (2016)	The Scripps Research Institute, University of Illinois Urbana-Champaign, Virginia Commonwealth University	United States	Background
3	Cost-Effectiveness in Health and Medicine (1996)	Harvard University, Rutgers University, U.S. Public Health Service	United States	—
4	Efficacy and safety of cholesterol-lowering treatment: prospective meta-analysis of data from 90,056 participants in 14 randomised trials of statins (2005)	—	—	—
5	Randomised trial of cholesterol lowering in 4444 patients with coronary heart disease: the Scandinavian Simvastatin Survival Study (4S) (1994)	—	—	—
6	MRC/BHF Heart Protection Study of cholesterol lowering with simvastatin in 20,536 high-risk individuals: a randomised placebo-controlled trial (2002)	—	—	—
7	Understanding the Complex of Suicide in Depression: from Research to Clinics (2020)	Federico II University, Hospital "G. Mazzini", Hospital "SS. Annunziata" ASL 4	Italy, United Kingdom	—
8	Interpretation of the evidence for the efficacy and safety of statin therapy (2016)	Brigham and Women's Hospital, Dell Medical School, The University of Texas at Austin, Imperial College London	Australia, Canada, United Kingdom	—
9	European guidelines on cardiovascular disease prevention in clinical practice: third joint task force of European and other societies on cardiovascular disease prevention in clinical practice (constituted by representatives of eight societies and by invited experts) (2003)	University Hospital	Belgium	—
10	Prevention of cardiovascular events and death with pravastatin in patients with coronary heart disease and a broad range of initial cholesterol levels (1998)	—	—	—
11	Surrogate End Points in Clinical Trials: Are We Being Misled? (1996)	University of Washington	United States	Background

No.	Citing paper	Citing institution(s)	Country	S2
12	Cost-Effectiveness in Health and Medicine (1996)	Harvard University, Rutgers University, U.S. Public Health Service	United States	—
13	Neurobiology of suicidal behaviour (2003)	New York State Psychiatric Institute	United States	—
14	Thematic review series: brain Lipids. Cholesterol metabolism in the central nervous system during early development and in the mature animal. (2004)	University of Texas Southwestern Medical School	United States	—
15	Lovastatin and beyond: the history of the HMG-CoA reductase inhibitors (2003)	Merck Research Laboratories	United States	—

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 is Influential signal, Valenzuela et al. 2015), or *Background* (a passing mention).

Contribution 3

Claim – Contribution 3

The researcher critically examined the conceptual validity of quality of life measurements, establishing a foundational framework for evaluating what these instruments actually assess in clinical and research contexts.

The researcher's contribution centers on a seminal 1998 paper published in the BMJ titled 'What are quality of life measurements measuring?' This work serves as the core of this line of inquiry, with no subsequent follow-up papers by the same researcher identified in the provided data. The contribution stands as a singular, high-impact intervention in the field.

This line of work appears to address a fundamental conceptual gap regarding the interpretability and validity of quality of life metrics. By questioning the underlying constructs these measurements capture, the researcher likely challenged prevailing assumptions about how patient-reported outcomes and health status indicators are defined and utilized. The title suggests a critical re-evaluation of the theoretical foundations of these tools, offering a new perspective on their scope and limitations.

The significance of this work is evidenced by its substantial citation count of 878, indicating widespread recognition and influence. Furthermore, citation analysis reveals that 95.9% of citing papers originate from independent researchers, demonstrating that the contribution has been broadly adopted and integrated into the work of the wider scientific community rather than remaining confined to the researcher's immediate circle.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 11

CORE PAPER

[What are quality of life measurements measuring?](#)

1998 · BMJ · 878 citations (GS)

Field-normalised: 533 Semantic Scholar citations place it in the top 1% of Medicine papers from 1998 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	Critique on the conceptualisation of quality of life: a review and evaluation of different conceptual approaches (2006)	Katholieke Universiteit Leuven	Belgium	Background

No.	Citing paper	Citing institution(s)	Country	S2
2	Does personality affect health-related quality of life? A systematic review (2017)	Evidera, Florida International University, Indiana University	United States	—
3	The World Health Organization's WHOQOL-BREF quality of life assessment: psychometric properties and results of the international field trial. A report from the WHOQOL group. (2004)	University of Bath	United Kingdom	—
4	The Cancer Patient and Quality of Life (2002)	European Organisation for Research and Treatment of Cancer	Belgium	—
5	Psychology of Physical Activity: Determinants, Well-Being and Interventions (2007)	University of Edinburgh, University of Southern Queensland	Australia, United Kingdom	—
6	The quality of life in acne: a comparison with general medical conditions using generic questionnaires (1999)	Churchill Hospital, University of Oxford, University of Wales College of Medicine	United Kingdom	—
7	Development and validation of a core outcome measure for palliative care: the palliative care outcome scale. Palliative Care Core Audit Project Advisory Group. (1999)	King's College School of Medicine and Dentistry	United Kingdom	—
8	Consequences of non-vascular trans-femoral amputation: a survey of quality of life, prosthetic use and problems (2001)	Göteborg University, Sahlgren University Hospital	Sweden	—
9	Whose quality of life is it anyway? The validity and reliability of the Quality of Life-Alzheimer's Disease (QoL-AD) scale (2003)	University College London	United Kingdom	—
10	Quality of life in allergic rhinitis and asthma. A population-based study of young adults (2000)	Inserm	France	—
11	Quality of life and its importance in orthodontics (2001)	University College London	United Kingdom	—

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
University College London	United Kingdom	SCImago #30	5
University of Oxford	United Kingdom	SCImago #26 · THE 1 · QS 4	2
University of Pittsburgh	United States	SCImago #212 · QS =281	2
U.S. Public Health Service	United States	—	2
Johns Hopkins University	United States	SCImago #33 · THE 16 · QS 24	2

Institution	Country	World ranking	Citing papers
University of Pittsburgh School of Medicine	United States	—	2
University of Chicago	United States	SCImago #124 · THE 15 · QS 13	2
University of Edinburgh	United Kingdom	SCImago #182 · THE 29 · QS 34	2
Brigham and Women's Hospital	United States	SCImago #130	2
Rutgers University	United States	—	2
King's College London	United Kingdom	THE 38 · QS 31	2
Harvard University	United States	SCImago #4 · THE =5 · QS 5	2
Qingdao Mental Health Center, Qingdao University	China	—	1
Shenzhen Kangning Hospital	China	SCImago #3620	1
University of Wales College of Medicine	United Kingdom	—	1

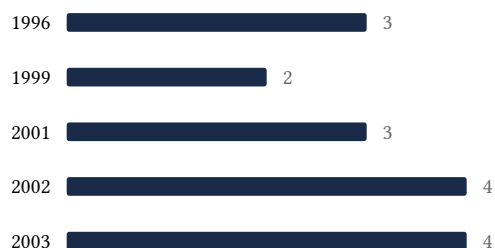
Geographic distribution of citing authors

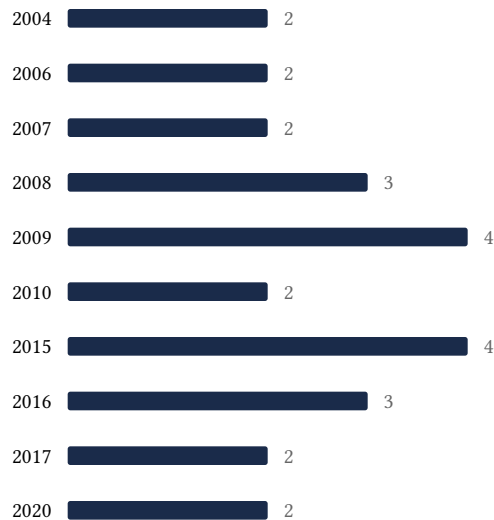
Country	Citing papers
United States	19
United Kingdom	14
Belgium	4
Australia	2
France	2
Switzerland	2
Germany	1
Italy	1
New Zealand	1
Spain	1
Sweden	1
Canada	1

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.





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	Self-reported Sleep Quality is Associated With the Metabolic Syndrome	12	Dhanasar – Prong 2 (well-positioned)
Contribution 2	Lowering cholesterol concentrations and mortality: a quantitative review of primary prevention trials.	15	Dhanasar – Prong 2 (well-positioned)
Contribution 3	What are quality of life measurements measuring?	11	Dhanasar – Prong 2 (well-positioned)