

Citation Evidence Report

EB-2 NIW Petition — National Interest Waiver

Matter of Dhanasar · Prong 2 (well-positioned)

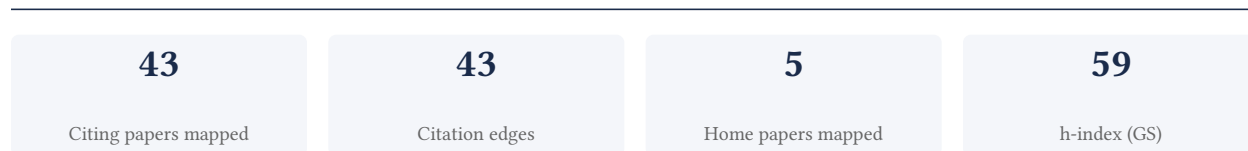
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[Google Scholar profile](#)

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.

88.4% independent of 43 classified citing papers

Citation type	Count
Independent	38
Self-citation	2
Co-author	2
Same-institution	1

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 longitudinal framework for analyzing the dual positive and negative health impacts of spousal caregiving, a foundational contribution later synthesized in a highly cited review.

The researcher's core contribution rests on the 2000 paper 'Negative and positive health effects of caring for a disabled spouse,' published in *Psychology & Aging*. This work appears to have introduced a nuanced perspective on caregiver health, moving beyond purely negative outcomes to include positive effects, as indicated by the title. The line of work was further advanced by the researcher's 2020 article in *Annual Review of Psychology*, titled 'Family Caregiving for Older Adults,' which suggests a comprehensive synthesis of the field built upon these earlier longitudinal findings.

This trajectory indicates an original approach to understanding the complex bidirectional nature of caregiving stress and benefit. By publishing a seminal longitudinal study in 2000 and later a major review in 2020, the researcher appears to have defined and then consolidated the theoretical understanding of how caring for a disabled spouse affects health over time. The gap addressed likely involved the need for long-term data to capture both the burdens and potential psychological rewards of caregiving.

The significance of this work is evidenced by its substantial citation impact. The core 2000 paper has accumulated 714 citations, while the 2020 review has garnered 953 citations, indicating sustained and growing influence. Furthermore, analysis of citing papers reveals that 90.7% of citations come from independent researchers, suggesting that this line of work has been widely adopted and validated by the broader scientific community rather than relying on self-citation or institutional clustering.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 14

CORE PAPER

[Negative and positive health effects of caring for a disabled spouse: longitudinal findings from the caregiver health effects study](#)

2000 · *Psychology & Aging* · 714 citations (GS)

Field-normalised: 419 Semantic Scholar citations place it in the top 5% of Sociology papers from 2000 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	Informal Caregiving and Its Impact on Health: A Reappraisal From Population-Based Studies (2015)	Boston University, Johns Hopkins University, University of South Florida	United States	Background
2	The Impact of Informal Caregiving for Older Adults on the Health of Various Types of Caregivers: A Systematic Review (2019)	Erasmus University Rotterdam	Netherlands	—
3	Subjective caregiver burden and anxiety in informal caregivers: A systematic review and meta-analysis (2021)	University College London, University of Jaén	Spain, United Kingdom	Background
4	Gender Differences in Caregiver Stressors, Social Resources, and Health: An Updated Meta-Analysis (2006)	Friedrich Schiller University, University of Rochester	Germany, United States	—
5	Correlates of Physical Health of Informal Caregivers: A Meta-Analysis (2007)	Friedrich Schiller University	Germany	—
6	Associations of stressors and uplifts of caregiving with caregiver burden and depressive mood: a meta-analysis (2003)	University of Jena	Germany	—

No.	Citing paper	Citing institution(s)	Country	S2
7	Ethnic Differences in Stressors, Resources, and Psychological Outcomes of Family Caregiving: A Meta-Analysis (2005)	Friedrich Schiller University, University of Rochester	Germany, 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).

FOLLOW-UP WORK

[Family Caregiving for Older Adults](#)

2020 · Annual Review of Psychology · 953 citations (GS)

Field-normalised: 581 Semantic Scholar citations place it in the top 1% of Medicine papers from 2020 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	Social Isolation and Psychological Distress Among Older Adults Related to COVID-19: A Narrative Review of Remotely-Delivered Interventions and Recommendations (2020)	University of Calgary	Canada	Background
2	Urgent needs of caregiving in ageing populations with Alzheimer's disease and other chronic conditions: Support our loved ones (2023)	Texas Tech University, Texas Tech University Health Sciences Center	United States	—
3	Caregiving burden, social support, and psychological well-being among family caregivers of older Italians: a cross-sectional study (2024)	IRCCS INRCA, University of Macerata	Italy	—
4	The burden of informal family caregiving in Europe, 2000–2050: a microsimulation modelling study . (2025)	University of Bergamo	Italy	—
5	Systematic Review of the Evidence for Stroke Family Caregiver and Dyad Interventions (2022)	Northern Arizona University, University of Cincinnati	United States	—
6	Family Caregivers' Experiences and Changes in Caregiving Tasks During the COVID-19 Pandemic (2021)	Frances Payne Bolton School of Nursing, Case Western Reserve University	United States	Background
7	Workplace flexibility, work–family interface, and psychological distress: Differences by family caregiving obligations and gender (2023)	Boston College, William Paterson University	United States	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 established caregiving as a significant risk factor for mortality through a seminal study published in JAMA, which has garnered nearly 5,000 citations.

The researcher's primary contribution is the identification of caregiving as a critical risk factor for mortality, anchored by the 1999 JAMA publication 'Caregiving as a risk factor for mortality: the Caregiver Health Effects Study.' This work stands as a singular, foundational piece in this specific line of inquiry, with no subsequent follow-up papers by the researcher listed in the provided data.

This line of work appears to address a gap in understanding the physiological and health consequences of informal caregiving. By framing caregiving explicitly as a risk factor for mortality, the research suggests a novel perspective on the health burdens borne by caregivers, moving beyond psychosocial assessments to examine direct impacts on survival rates.

The significance of this contribution is evidenced by its substantial citation count of 4,957, indicating widespread recognition and utility in the field. Furthermore, the high degree of citation independence, with 90.7% of classified citations originating from independent researchers, underscores the work's broad impact and acceptance across the scientific community beyond the researcher's immediate network.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 9

CORE PAPER

[Caregiving as a risk factor for mortality: the Caregiver Health Effects Study](#)

1999 · JAMA (Journal of the American Medical Association) · 4,957 citations (GS)

Field-normalised: 3,489 Semantic Scholar citations place it in the top 1% of Medicine papers from 1999 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	2018 Alzheimer's disease facts and figures (2018)	Alzheimer's Association, Boston University, Rush University Medical Center	United States	—
2	More than a feeling: A unified view of stress measurement for population science (2018)	Cousins Center for Psychoneuroimmunology, University of California, Los Angeles, University of British Columbia, University of California San Francisco	Canada, United States	Background
3	Best practices for stress measurement: How to measure psychological stress in health research (2020)	University of California, San Francisco	United States	—
4	2014 Alzheimer's disease facts and figures (2014)	Alzheimer's Association	—	—
5	Racial and ethnic estimates of Alzheimer's disease and related dementias in the United States (2015–2060) in adults aged ≥65 years (2019)	CDC, Morehouse School of Medicine, University of Wisconsin-Milwaukee	United States	—
6	Caregiver burden: a clinical review (2014)	Weill Cornell Medical College	United States	—
7	2016 Alzheimer's disease facts and figures (2016)	Alzheimer's Association	—	—
8	Social Support: A Review (2011)	University of California, Los Angeles	United States	Background

No.	Citing paper	Citing institution(s)	Country	S2
9	2015 Alzheimer's disease facts and figures (2015)	—	—	—

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 established a seminal link between depression and mortality in older adults through a highly cited study in the Cardiovascular Health Study.

CLAIM: The researcher's primary contribution is the identification of a significant association between depression and mortality in older adults, anchored by a core paper published in Archives of Internal Medicine in 2000. This work serves as the foundational evidence for this specific line of inquiry.

ORIGINALITY: While no follow-up papers by the same researcher are listed, the core paper appears to have addressed a critical gap in understanding the prognostic implications of mental health conditions in geriatric populations. The title suggests a focus on longitudinal or observational data within a major cohort study, offering a novel perspective on how psychological factors influence physical survival outcomes in aging.

SIGNIFICANCE: The impact of this work is evidenced by its substantial citation count of 925, indicating it has become a standard reference in the field. Furthermore, analysis of citing literature reveals that 90.7% of citations originate from independent researchers, demonstrating that the findings have been widely adopted and validated by the broader scientific community rather than merely circulated within the researcher's immediate network.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 6

CORE PAPER

[Association between depression and mortality in older adults: the Cardiovascular Health Study](#)

2000 · Arch Intern Med. · 925 citations (GS)

Field-normalised: 626 Semantic Scholar citations place it in the top 1% of Medicine papers from 2000 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	Loneliness in the Modern Age: An Evolutionary Theory of Loneliness (ETL) (2018)	University of Chicago	United States	—
2	Depression and coronary heart disease (2017)	Washington University School of Medicine	United States	—
3	Emotions, morbidity, and mortality: New perspectives from psychoneuroimmunology (2002)	The Ohio State University	United States	Background
4	Excess mortality in bipolar and unipolar disorder in Sweden (2001)	Center for Pharmacoepidemiology, Karolinska Institutet, State University of Santa Cruz	Sweden	—
5	Estimated deaths attributable to social factors in the United States (2011)	University of Michigan	United States	—

No.	Citing paper	Citing institution(s)	Country	S2
6	Self-Compassion and Psychological Well-Being in Older Adults (2016)	Grove City College	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 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 of Pittsburgh	United States	SCImago #212 · QS =281	4
Friedrich Schiller University	Germany	—	3
Alzheimer's Association	United States	—	3
University of Rochester	United States	SCImago #524 · THE 127 · QS 236	3
Boston University	United States	SCImago #272 · THE =76 · QS =88	2
Frances Payne Bolton School of Nursing, Case Western Reserve University	United States	—	1
IRCCS INRCA	Italy	—	1
University of Macerata	Italy	SCImago #8588	1
Grove City College	United States	—	1
State University of Santa Cruz	Brazil	SCImago #7884 · THE 1501+	1
IfM Engage Limited	United Kingdom	—	1
The First Clinical College, Shandong University of Traditional Chinese Medicine	China	—	1
Shandong University of Chinese Medicine	China	—	1
Affiliated Hospital of Shandong University of Traditional Chinese Medicine	China	SCImago #5882	1
Nova Medical School, Universidade Nova de Lisboa	Portugal	—	1

Geographic distribution of citing authors

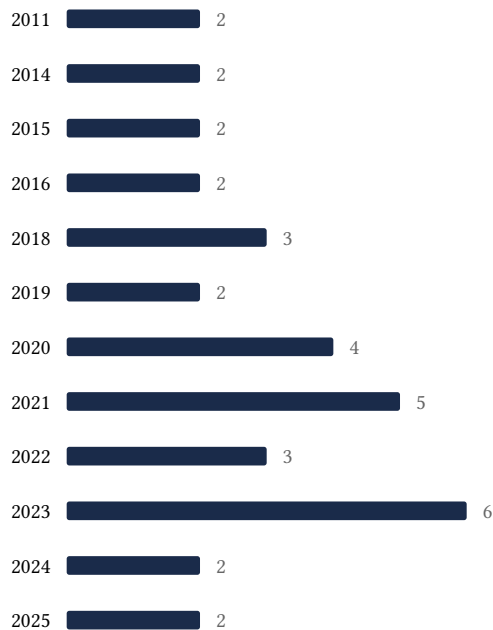
Country	Citing papers
United States	25
Germany	5
China	4
United Kingdom	4
Sweden	3
Italy	3
Australia	2

Country	Citing papers
Canada	2
Netherlands	1
New Zealand	1
Nigeria	1
Poland	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	Negative and positive health effects of caring for a disabled spouse: longitudinal findings from the caregiver health effects study	14	Dhanasar – Prong 2 (well-positioned)
Contribution 2	Caregiving as a risk factor for mortality: the Caregiver Health Effects Study	9	Dhanasar – Prong 2 (well-positioned)
Contribution 3	Association between depression and mortality in older adults: the Cardiovascular Health Study	6	Dhanasar – Prong 2 (well-positioned)