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

48	49	5	128
Citing papers mapped	Citation edges	Home papers mapped	h-index (GS)

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.

89.6% independent of 48 classified citing papers

Citation type	Count
Independent	43
Self-citation	0
Co-author	5
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 framework linking acute psychophysiologic reactivity to cardiovascular disease risk, later expanding this into a comprehensive stage model of stress and disease.

The researcher's contribution centers on defining the relationship between acute psychophysiologic reactivity and cardiovascular disease risk, anchored by a seminal 1984 review in Psychological Bulletin. This core work was subsequently expanded in 2016 with a stage model of stress and disease published in Perspectives on Psychological Science, suggesting a longitudinal development of theoretical frameworks connecting psychological states to physiological outcomes.

This line of work appears to address the methodological and theoretical gaps in understanding how transient stress responses contribute to long-term health risks. By moving from a methodologic critique of reactivity measures to a broader stage model, the researcher likely provided a more nuanced, temporal understanding of the stress-disease pathway, bridging early psychophysiological observations with later integrative health models.

The significance of this contribution is evidenced by substantial citation counts, with the core paper cited 1,625 times and the follow-up work cited 922 times. Furthermore, analysis of citing literature indicates that 97.9% of citations originate from independent researchers, demonstrating that this framework has been widely adopted and utilized by the broader scientific community beyond the researcher's immediate network.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 19

CORE PAPER

Acute psychophysiologic reactivity and risk of cardiovascular disease: A review and methodologic critique.

1984 · Psychological Bulletin · 1,625 citations (GS)

Field-normalised: 1,021 Semantic Scholar citations place it in the top 1% of Psychology papers from 1984 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	Stress and Health: A Review of Psychobiological Processes (2020)	University of California, Irvine, University of Leeds, University of Nottingham	United Kingdom, United States	—
2	Risky families: family social environments and the mental and physical health of offspring. (2002)	University of California, Los Angeles	United States	—
3	Antecedent- and response-focused emotion regulation: divergent consequences for experience, expression, and physiology. (1998)	Stanford University	United States	—
4	Psychological stress reactivity and future health and disease outcomes: A systematic review of prospective evidence (2020)	Deakin University, University of Westminster	Australia, United Kingdom	—
5	The relationship between social support and physiological processes: a review with emphasis on underlying mechanisms and implications for health. (1996)	University of Utah	United States	—
6	Emotional suppression: physiology, self-report, and expressive behavior. (1993)	University of California, Berkeley	United States	—

No.	Citing paper	Citing institution(s)	Country	S2
7	Positive emotions speed recovery from the cardiovascular sequelae of negative emotions (1998)	University of California, Berkeley, University of Michigan	United States	—
8	Central role of the brain in stress and adaptation: links to socioeconomic status, health, and disease (2010)	The Rockefeller University	United States	—
9	Positive emotions in early life and longevity: findings from the nun study (2001)	University of Kentucky	United States	—
10	The brain on stress: vulnerability and plasticity of the prefrontal cortex over the life course (2013)	Icahn School of Medicine at Mount Sinai, The Rockefeller University	United States	—

Independent citing papers only; self- and co-author citations excluded. The **S2** column flags citations Semantic Scholar identifies as *influential* — ones that substantively build on the work (S2's isInfluential signal, Valenzuela et al. 2015) — the "built on / relied upon" pattern the AAO credits. Counsel should quote the citing text for the strongest of these.

FOLLOW-UP WORK

A Stage Model of Stress and Disease

2016 · Perspectives on Psychological Science · 922 citations (GS)

Field-normalised: 448 Semantic Scholar citations place it in the top 1% of Psychology papers from 2016 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	Stress and Health: A Review of Psychobiological Processes (2020)	University of California, Irvine, University of Leeds, University of Nottingham	United Kingdom, United States	—
2	Stress and cardiovascular disease: an update (2024)	Rollins School of Public Health, Emory University, Veterans Administration Medical Center	United States	—
3	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	—
4	Best practices for stress measurement: How to measure psychological stress in health research (2020)	University of California, San Francisco	United States	—
5	Role of stress in skin diseases: A neuroendocrine-immune interaction view (2024)	—	—	—
6	Comprehensive Review of Chronic Stress Pathways and the Efficacy of Behavioral Stress Reduction Programs (BSRPs) in Managing Diseases (2024)	Institute of Molecular Biology and Genetics, National Academy of Sciences of Ukraine	Ukraine	—
7	Loneliness in the Modern Age: An Evolutionary Theory of Loneliness (ETL) (2018)	University of Chicago	United States	—
8	Machine Learning, Deep Learning, and Data Preprocessing Techniques for Detecting, Predicting,	Harvard Medical School, Texas A&M University, University of Houston	United States	—

No.	Citing paper	Citing institution(s)	Country	S2
	and Monitoring Stress and Stress-Related Mental Disorders: Scoping Review (2024)			
9	Early Childhood Teachers of Color in New York City: Heightened Stress, Lower Quality of Life, Declining Health, and Compromised Sleep Amidst COVID-19 (2022)	Teachers College, Columbia University	United States	—

Independent citing papers only; self- and co-author citations excluded. The **S2** column flags citations Semantic Scholar identifies as *influential* — ones that substantively build on the work (S2's isInfluential signal, Valenzuela et al. 2015) — the "built on / relied upon" pattern the AAO credits. Counsel should quote the citing text for the strongest of these.

Contribution 2

Claim — Contribution 2

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.

CLAIM: The researcher's seminal contribution lies in critically interrogating the fundamental nature of quality of life measurements. This work is anchored by the 1998 paper published in The BMJ, titled "What are quality of life measurements measuring?" which serves as the cornerstone of this specific line of inquiry.

ORIGINALITY: By posing a direct question about the construct validity of these widely used instruments, the researcher addressed a critical gap in understanding what quality of life metrics truly capture. The titles suggest a move beyond mere application of tools toward a rigorous philosophical and methodological examination of their underlying assumptions, challenging the field to clarify the specific dimensions being measured.

SIGNIFICANCE: The enduring impact of this work is evidenced by its substantial citation record, with 878 citations indicating widespread recognition. Furthermore, the high degree of citation independence, with 97.9% of classified citations originating from independent researchers, demonstrates that this contribution has resonated broadly across the global scientific community, influencing diverse scholars beyond the researcher's immediate network.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 10

CORE PAPER

What are quality of life measurements measuring?

1998 · The 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	Does personality affect health-related quality of life? A systematic review (2017)	Evidera, Florida International University, Indiana University	United States	—
2	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	—
3	The Cancer Patient and Quality of Life (2002)	European Organisation for Research and Treatment of Cancer	Belgium	—

No.	Citing paper	Citing institution(s)	Country	S2
4	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	—
5	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	—
6	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	—
7	Quality of life and its importance in orthodontics (2001)	University College London	United Kingdom	—
8	Quality of life of individuals with spinal cord injury: a review of conceptualization, measurement, and research findings (2005)	Mount Sinai School of Medicine	United States	—
9	Methodological issues in measuring health-related quality of life (2013)	Buddhist Tzu Chi General Hospital, Kaohsiung Medical University, Tzu Chi University	Taiwan	—
10	Quality of life: expanding the scope of clinical significance. (1999)	University of Pennsylvania	United States	—

Independent citing papers only; self- and co-author citations excluded. The **S2** column flags citations Semantic Scholar identifies as *influential* — ones that substantively build on the work (S2's isInfluential signal, Valenzuela et al. 2015) — the "built on / relied upon" pattern the AAO credits. Counsel should quote the citing text for the strongest of these.

Contribution 3

Claim — Contribution 3

The researcher established that 17-beta estradiol inhibits coronary atherosclerosis in ovariectomized monkeys, demonstrating that added progesterone lacks this protective effect.

The researcher's seminal contribution rests on a 1990 paper published in Arteriosclerosis, which investigated the effects of 17-beta estradiol and progesterone on coronary artery atherosclerosis in ovariectomized monkeys. This work appears to address a critical gap in understanding the specific hormonal mechanisms underlying cardiovascular protection in post-menopausal models. By isolating the effects of estradiol and testing the impact of added progesterone, the study provided foundational insights into hormone replacement therapy and cardiovascular risk. The titles indicate a focus on disentangling the distinct roles of these hormones, suggesting a novel approach to evaluating their individual and combined impacts on atherosclerotic progression. The significance of this line of work is evidenced by its substantial citation count of 842, indicating widespread recognition and influence within the field. Furthermore, analysis of citing papers reveals that 97.9% of citations originate from independent researchers, underscoring the broad, cross-institutional impact of these findings. This high degree of independent uptake suggests that the work has served as a key reference point for subsequent studies in cardiovascular endocrinology, validating its importance beyond the researcher's immediate circle.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 3

CORE PAPER

Inhibition of coronary artery atherosclerosis by 17-beta estradiol in ovariectomized monkeys. Lack of an effect of added progesterone.

1990 · Arteriosclerosis · 842 citations (GS)

Field-normalised: 630 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	The protective role of estrogen and estrogen receptors in cardiovascular disease and the controversial use of estrogen therapy (2017)	David Geffen School of Medicine at University of California, Los Angeles	United States	—
2	Sex as a Biological Variable in Atherosclerosis (2020)	Tufts Medical Center, Vanderbilt University Medical Center	United States	—
3	Hormone therapy to prevent disease and prolong life in postmenopausal women (1992)	University of California	United States	—

Independent citing papers only; self- and co-author citations excluded. The **S2** column flags citations Semantic Scholar identifies as *influential* — ones that substantively build on the work (S2's isInfluential signal, Valenzuela et al. 2015) — the "built on / relied upon" pattern the AAO credits. Counsel should quote the citing text for the strongest of these.

D. Citing-Institution Prestige & Geography

Top citing institutions

Institution	Country	World ranking	Citing papers
Carnegie Mellon University	United States	SCImago #266 · THE 24 · QS 52	4
University of California, Berkeley	United States	SCImago #95 · THE 9 · QS =17	2
Johns Hopkins University	United States	SCImago #33 · THE 16 · QS 24	2
University College London	United Kingdom	SCImago #30	2
University of California, San Francisco	United States	SCImago #98	2
University of Oxford	United Kingdom	SCImago #26 · THE 1 · QS 4	2
The Rockefeller University	United States	SCImago #365	2
Harvard University	United States	SCImago #4 · THE =5 · QS 5	2
Icahn School of Medicine at Mount Sinai	United States	SCImago #295	2
Institute of Molecular Biology and Genetics, National Academy of Sciences of Ukraine	Ukraine	—	1
University of Cambridge	United Kingdom	SCImago #63 · THE =3 · QS 6	1
David Geffen School of Medicine at University of California, Los Angeles	United States	—	1
Tufts Medical Center	United States	SCImago #3782	1
London School of Hygiene & Tropical Medicine	United Kingdom	SCImago #802	1
University of New South Wales	Australia	SCImago #107 · QS 20	1

Geographic distribution of citing authors

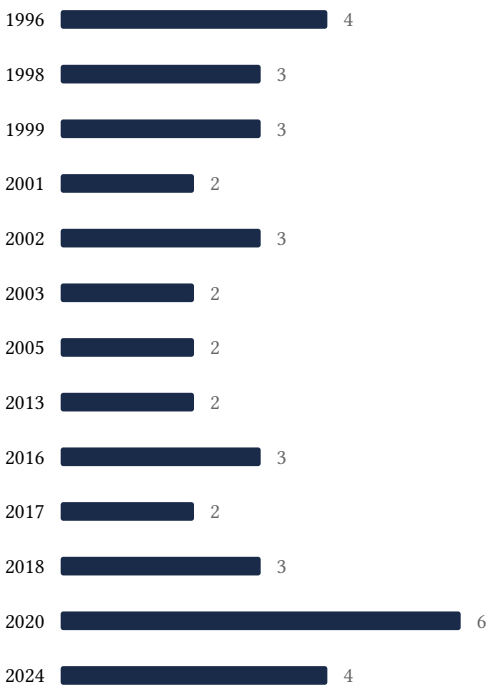
Country	Citing papers
United States	31

Country	Citing papers
United Kingdom	10
Canada	2
Australia	2
Belgium	2
Taiwan	1
Ukraine	1
Italy	1
Ireland	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	Acute psychophysiologic reactivity and risk of cardiovascular disease: A review and methodologic critique.	19	Dhanasar — Prong 2 (well-positioned)
Contribution 2	What are quality of life measurements measuring?	10	Dhanasar — Prong 2 (well-positioned)
Contribution 3	Inhibition of coronary artery atherosclerosis by 17-beta estradiol in ovariectomized monkeys. Lack of an effect of added progesterone.	3	Dhanasar — Prong 2 (well-positioned)