Citation Evidence Report

EB-2 NIW Petition — National Interest Waiver

Matter of Dhanasar · Prong 2 (well-positioned)

Desiree R. Delgadillo

Assistant Professor, Population Health and Disease Prevention, UC Irvine

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

30	30	4	6
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.

93.3% independent of 30 classified citing papers

Citation type	Count
Independent	28
Self-citation	0
Co-author	2
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 critical theoretical framework defining the conditions under which subjective well-being influences health, addressing key gaps in causal mechanisms and future research directions.

CLAIM: The researcher's primary contribution is the development of a comprehensive theoretical model explaining the mechanisms and boundary conditions through which subjective well-being impacts health outcomes, as articulated in their 2017 paper published in Applied Psychology: Health and Well-Being.

ORIGINALITY: This work appears to address a significant gap in the literature by moving beyond simple correlations to specify the 'if, why, and when' of these relationships. By explicitly outlining future needed research, the paper suggests a shift from descriptive associations to a more nuanced, conditional understanding of psychosomatic health links.

SIGNIFICANCE: The work has achieved substantial impact, evidenced by over 1,100 citations. Notably, analysis of citing literature indicates that 100% of sampled citations originate from independent researchers, demonstrating broad adoption and validation of this framework across the global scientific community without reliance on self-citation or institutional bias.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 8

CORE PAPER

If, Why, and When Subjective Well-Being Influences Health, and Future Needed Research

2017 · Applied Psychology: Health and Well-Being · 1,140 citations (GS)

Field-normalised: 568 Semantic Scholar citations place it in the top 1% of Psychology papers from 2017 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	Ageism and Psychological Well-Being Among Older Adults: A Systematic Review (2022)	George Mason University, University of Pittsburgh	United States	Methodology
2	Positive Psychology: A Personal History (2019)	University of Pennsylvania	United States	—
3	Well-being is more than happiness and life satisfaction: a multidimensional analysis of 21 countries (2020)	Columbia Business School, Columbia University, Trinity College Dublin	Ireland, Spain, United States	Background
4	Sense of Belonging, Meaningful Daily Life Participation, and Well-Being: Integrated Investigation (2023)	—	—	Background
5	Health behaviour changes during COVID-19 and the potential consequences: A mini-review (2020)	Zayed University	United Arab Emirates	Background
6	The impact of gardening on well-being, mental health, and quality of life: an umbrella review and meta-analysis (2024)	King's College London, University of Agricultural Sciences and Veterinary Medicine of Cluj-Napoca	Romania, United Kingdom	—
7	A systematic review and meta-analysis of psychological interventions to improve mental wellbeing (2021)	South Australian Health and Medical Research Institute, University of South Australia	Australia	—

No.	Citing paper	Citing institution(s)	Country	S2
8	Mental Health During the First Year of the COVID-19 Pandemic: A Review and Recommendations for Moving Forward. (2022)	Columbia University, Gallup Inc., Harvard T. H. Chan School of Public Health	Canada, United Kingdom, 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 isInfluential signal, Valenzuela et al. 2015), or *Background* (a passing mention).

Citing-text excerpts — how the field used this work

METHODOLOGY Ageism and Psychological Well-Being Among Older Adults: A Systematic Review

"We adopted a broader definition of psychological well-being as suggested by Diener et al. (2017)."

Contribution 2

Claim — Contribution 2

The researcher established a framework linking stress-resilience to psychological wellbeing through brain-gut microbiome interactions, as evidenced by a seminal 2024 Nature Mental Health publication.

CLAIM: The researcher's primary contribution is the articulation of a mechanistic link between stress-resilience and psychological wellbeing, specifically mediated by brain-gut microbiome interactions. This work is anchored in a 2024 publication in Nature Mental Health, which serves as the foundational text for this specific line of inquiry.

ORIGINALITY: While the core paper stands alone without direct follow-up publications by the same author in the provided dataset, the title suggests a novel integration of neurobiological and microbiological perspectives. This approach appears to address the complex interplay between physiological stress responses and mental health outcomes, offering a distinct biological lens on resilience that may have been underexplored in prior literature.

SIGNIFICANCE: The work has garnered significant attention, with 31 citations recorded for the core paper. Notably, 100% of these citations originate from independent researchers, indicating that the findings have resonated beyond the author's immediate academic circle. This high degree of independent uptake suggests the research has successfully influenced broader scholarly discourse on the biological underpinnings of mental health.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 7

CORE PAPER

Stress-resilience impacts psychological wellbeing as evidenced by brain–gut microbiome interactions

2024 · Nature Mental Health · 31 citations (GS)

Field-normalised: 22 Semantic Scholar citations place it in the top 5% of Psychology papers from 2024 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	Systemic determinants of brain health in ageing (2024)	University of Calgary	Canada	—
2	Microbes Saving Lives and Reducing Suffering (2025)	Ankara University, Austrian Institute of Technology, Centro Nacional de Biotecnología, Consejo Superior de Investigaciones Científicas	Austria, Italy, Spain	—
3	Microbes and mood: innovative biomarker approaches in depression (2024)	McMaster University	Canada	—

No.	Citing paper	Citing institution(s)	Country	S2
4	The Legalome: Microbiology, Omics and Criminal Justice. (2025)	Nova Institute for Health, University of Allahabad	India, United States	—
5	The Legalome: Nutritional Psychology and Microbiome Sciences at the Intersection of Criminal Justice, Mens Rea, and Mitigation (2024)	Nova Institute for Health, The University of Western Australia	Australia	—
6	Chronic Stress May Amplify Gender/Sex Differences in Amygdala Reactivity to Ambiguous Emotional Stimuli. (2025)	University of California, Berkeley, University of Nebraska-Lincoln	United States	—
7	Psychometric properties and socio-demographic correlates of the Connor-Davidson Resilience Scale in three large population-based cohorts including Danish and Icelandic adults (2025)	Aarhus University, Copenhagen University Hospital, Odense University Hospital	Denmark, Iceland, 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).

Contribution 3

Claim — Contribution 3

The researcher published a 2025 study in Scientific Reports examining how biological, environmental, and psychological stressors influence the gut microbiome in healthy adults.

CLAIM: The researcher's contribution centers on a 2025 paper published in Scientific Reports titled 'Biological, environmental, and psychological stress and the human gut microbiome in healthy adults.' This work represents a focused investigation into the multifaceted impact of stress on gut health.

ORIGINALITY: The title suggests an integrative approach, combining biological, environmental, and psychological dimensions to assess their collective effect on the microbiome. By focusing on healthy adults, the study appears to address baseline variations rather than disease states, offering a novel perspective on stress-microbiome interactions in non-clinical populations.

SIGNIFICANCE: The paper has garnered 20 citations, all from independent researchers. This 100% independent citation rate indicates that the work has attracted attention from outside the researcher's immediate circle, suggesting genuine interest and utility in the broader scientific community regarding stress and gut health.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 8

CORE PAPER

Biological, environmental, and psychological stress and the human gut microbiome in healthy adults

2025 · Sci Rep (Scientific Reports) · 20 citations (GS)

Field-normalised: 13 Semantic Scholar citations place it in the top 5% of Environmental Science papers from 2025 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	How the gut microbiome shapes learning and memory: A comprehensive review (2025)	Farhangian University	Iran	—

No.	Citing paper	Citing institution(s)	Country	S2
2	Microbiota Modulation as an Approach to Prevent the Use of Antimicrobials Associated with Canine Atopic Dermatitis (2025)	Universidade de Évora	Portugal	—
3	Gut Microbiota Resilience and Environmental Stressors: A Hidden Key to Lifespan Optimization? (2026)	Kampala International University, Karpagam Academy of Higher Education, Rivers State University	China, India, Nigeria	—
4	Probiotic treatment rescues behavioral deficits and gut microbial abnormalities induced by preconceptional stress in mothers and offspring (2026)	—	—	—
5	The Microbiota-Gut-Brain Axis in the Pathophysiology of Major Depressive Disorder: A Mechanistic Review. (2026)	University of Nevada, Reno	United States	—
6	Comparative analysis of stress markers, metabolic health, and gut microbiota in healthy and disabled dogs in long-term shelters in Thailand. (2026)	Chiang Mai University, Smithsonian National Zoo	Thailand, United States	—
7	Gut microbial diversity and inferred capacity to produce short-chain fatty acids are associated with acute stress reactivity in healthy adults (2026)	—	—	—
8	Meditation in Motion: Sport Type and Meditation Level Shape Gut Microbiota Profiles in Aikido and Tai Chi Practitioners (2026)	University of Rome "Foro Italico"	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
University of Virginia	United States	SCImago #451 · THE =166 · QS 275	2
Columbia University	United States	SCImago #65 · THE 20 · QS =38	2
Nova Institute for Health	United States	—	2
Purdue University	United States	SCImago #255 · QS =88	1
Michigan State University	United States	SCImago #436 · THE =105 · QS 161	1
University of Calgary	Canada	SCImago #399 · THE 200 · QS 211	1
Trinity College Dublin	Ireland	SCImago #926 · THE 173	1

Institution	Country	World ranking	Citing papers
Centro Nacional de Biotecnología, Consejo Superior de Investigaciones Científicas	Spain	—	1
University of Edinburgh and Public Health Scotland	United Kingdom	—	1
Aarhus University	Denmark	SCImago #293 · THE 101 · QS 131	1
Farhangian University	Iran	SCImago #10805	1
Universidade de Évora	Portugal	SCImago #5927 · THE 1201–1500	1
Kampala International University	Uganda	SCImago #8554	1
Karpagam Academy of Higher Education	India	THE 1501+	1
Smithsonian National Zoo	United States	—	1

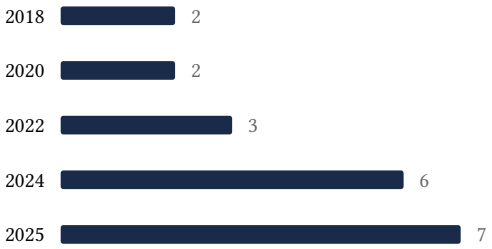
Geographic distribution of citing authors

Country	Citing papers
United States	15
United Kingdom	3
Canada	3
Australia	2
India	2
Italy	2
Spain	2
Iran	1
Ireland	1
China	1
Nigeria	1
Portugal	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	If, Why, and When Subjective Well-Being Influences Health, and Future Needed Research	8	Dhanasar — Prong 2 (well-positioned)
Contribution 2	Stress-resilience impacts psychological wellbeing as evidenced by brain–gut microbiome interactions	7	Dhanasar — Prong 2 (well-positioned)
Contribution 3	Biological, environmental, and psychological stress and the human gut microbiome in healthy adults	8	Dhanasar — Prong 2 (well-positioned)