

# 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 2026-06-10 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

99	99	30	115
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.

**85.7% independent** of 91 classified citing papers

Citation type	Count
Independent	78
Self-citation	6
Co-author	6
Same-institution	1

8 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 for analyzing the longitudinal spread of health behaviors and emotions within large social networks, demonstrating their collective dynamics over decades.*

The researcher's contribution centers on the seminal 2007 paper, 'The spread of obesity in a large social network over 32 years,' which serves as the core of this line of work. This study appears to have pioneered the examination of how health-related conditions propagate through social structures over extended periods, establishing a critical baseline for understanding network effects in public health.

This line of work appears to address the gap in understanding whether social contagion mechanisms apply broadly beyond a single condition. By publishing follow-up studies in 2008 on the dynamic spread of happiness and the collective dynamics of smoking, the researcher suggests a generalized theoretical model. The titles indicate an expansion from obesity to emotional states and other behavioral habits, implying that the underlying social network mechanisms are robust across diverse human experiences.

The significance of this contribution is evidenced by the high citation counts of the core paper and its immediate successors, which have garnered thousands of citations each. Furthermore, the fact that 85.7% of classified citations originate from independent researchers indicates that this framework has been widely adopted and validated by the broader scientific community, rather than being confined to the researcher's immediate circle.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 78 · 1 flagged influential by Semantic Scholar

#### CORE PAPER

### [The spread of obesity in a large social network over 32 years](#)

2007 · 7,681 citations (GS)

Field-normalised: 1,549 Semantic Scholar citations place it in the top 1% of Sociology papers from 2007 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	<a href="#">Obesity and cardiovascular disease: an ESC clinical consensus statement</a>	Agostino Gemelli University Polyclinic, Frederiksberg Hospital, Helmholtz Zentrum München	Belgium, Denmark, Germany	—
2	<a href="#">Epidemic processes in complex networks</a>	Delft University of Technology, Institute for Complex Systems, Northeastern University	Italy, Netherlands, United States	—
3	<a href="#">Vital nodes identification in complex networks</a>	ETH Zurich, Hangzhou Normal University, University of Electronic Science and Technology of China	China, Switzerland	—
4	<a href="#">Dissemination and implementation research in health: translating science to practice</a>	Louis Stokes Cleveland VA Medical Center, University of Michigan, VA Ann Arbor Healthcare System	United States	—
5	<a href="#">Report of the Lancet Commission on the Value of Death: bringing death back into life</a>	At Bristol, Cardiff University, Committee on Climate Change	China, India, Malawi	—

No.	Citing paper	Citing institution(s)	Country	S2
6	<a href="#">Social relationships and health: A flashpoint for health policy</a>	The University of Texas at Austin, University of Texas at Austin	United States	—
7	<a href="#">Social relationships and health behavior across the life course</a>	University of Texas	United States	—
8	<a href="#">Social determinants of risk and outcomes for cardiovascular disease: a scientific statement from the American Heart Association</a>	—	—	—
9	<a href="#">Networks, crowds, and markets: Reasoning about a highly connected world</a>	Cornell University	United States	—
10	<a href="#">Social data: Biases, methodological pitfalls, and ethical boundaries</a>	Microsoft Corporation, Microsoft Research New York City (United States), Universitat Pompeu Fabra	Spain, United States	—
11	<a href="#">Statistical inference links data and theory in network science</a>	Maastricht University, University of Padua	Italy, Netherlands	—
12	<a href="#">The i-frame and the s-frame: How focusing on individual-level solutions has led behavioral public policy astray</a>	Carnegie Mellon University, University of Warwick	United Kingdom, United States	—
13	<a href="#">The four dimensions of social network analysis: An overview of research methods, applications, and software tools</a>	Nanyang Technological University	Singapore	—
14	<a href="#">Exercise and type 2 diabetes: the American College of Sports Medicine and the American Diabetes Association: joint position statement</a>	—	—	—
15	<a href="#">Stewardship of global collective behavior</a>	Delft University of Technology, Humboldt-Universität zu Berlin, Hunter College of the City University of New York	Germany, Netherlands, United States	—
16	<a href="#">Why social relationships are important for physical health: A systems approach to understanding and modifying risk and protection</a>	Brigham Young University	United States	Influential
17	<a href="#">Constructing, conducting and interpreting animal social network analysis</a>	Dalhousie University, Max Planck Institute for Ornithology	Canada, Germany	—
18	<a href="#">Egocentric network analysis: Foundations, methods, and models</a>	Indiana University	United States	—
19	<a href="#">Smart food policies for obesity prevention</a>	Australian National University, Brookings Institution, University College London	Australia, Chile, New Zealand	—
20	<a href="#">Statistical physics of vaccination</a>	École Polytechnique Fédérale de Lausanne, Greenwich University, International Prevention Research Institute	Canada, China, France	—
21	<a href="#">Social and economic networks</a>	Stanford University	United States	—

No.	Citing paper	Citing institution(s)	Country	S2
22	<a href="#">Co-writing with opinionated language models affects users' views</a>	Cornell Tech, Cornell University, Microsoft Research (India)	Germany, India, Israel	—
23	<a href="#">The spread of behavior in an online social network experiment</a>	Massachusetts Institute of Technology	United States	—
24	<a href="#">Understanding social networks: Theories, concepts, and findings</a>	University of Minnesota System	United States	—
25	<a href="#">Doing social network research: Network-based research design for social scientists</a>	—	—	—
26	<a href="#">Loneliness, social isolation, and behavioral and biological health indicators in older adults.</a>	Institute for Fiscal Studies, University College London	United Kingdom	—
27	<a href="#">The convoy model: Explaining social relations from a multidisciplinary perspective</a>	Eastern Michigan University, University of Michigan	United States	—
28	<a href="#">Adipose tissue and insulin resistance in obese</a>	Auburn University, South Dakota State University	United States	—
29	<a href="#">The epidemiology of obesity: a big picture</a>	Harvard School of Public Health	United States	—
30	<a href="#">Dietary and policy priorities for cardiovascular disease, diabetes, and obesity: a comprehensive review</a>	—	—	—

Showing the 30 most-cited of 78 independent citing papers.

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

### [Dynamic spread of happiness in a large social network: longitudinal analysis over 20 years in the Framingham Heart Study](#)

2008 · 3,322 citations (GS)

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

#### FOLLOW-UP WORK

### [The collective dynamics of smoking in a large social network](#)

2008 · 3,228 citations (GS)

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

## Contribution 2

### Claim — Contribution 2

*The researcher advanced computational social science as a distinct field, establishing a foundational framework that has been widely adopted by independent scholars.*

CLAIM: The researcher's seminal 2009 paper, titled 'Computational social science,' serves as the cornerstone of this contribution line. This work appears to define or significantly advance the methodological boundaries of the field, standing as a primary reference point for subsequent inquiry.

ORIGINALITY: By publishing this core paper in 2009, the researcher addressed the emerging need for rigorous computational approaches within social science. The absence of follow-up papers by the same author suggests this single work provided a comprehensive or definitive framework that did not require immediate extension by the original creator, allowing the broader community to build upon its foundations.

SIGNIFICANCE: The work has achieved substantial impact, evidenced by 5,477 citations. Notably, 85.7% of classified citing papers originate from independent researchers, indicating that the contribution has been widely adopted and utilized by the broader academic community rather than remaining confined to the researcher's immediate circle.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 0

#### CORE PAPER

### [Computational social science](#)

2009 · 5,477 citations (GS)

Field-normalised: 411 Semantic Scholar citations place it in the top 1% of Computer Science papers from 2009 indexed by Semantic Scholar, by citation count.

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

## Contribution 3

### Claim – Contribution 3

*The researcher established a foundational framework for understanding end-of-life priorities by systematically comparing perspectives across patients, families, physicians, and care providers.*

The researcher's core contribution rests on the seminal 2000 paper titled 'Factors considered important at the end of life by patients, family, physicians, and other care providers.' This work appears to have defined a critical baseline for understanding the multidimensional nature of end-of-life care preferences. By explicitly listing diverse stakeholders in the title, the research suggests a novel approach to capturing the complex interplay between medical professionals and those receiving or supporting care.

This line of work appears to address a significant gap in prior literature, which may have focused narrowly on either clinical outcomes or single-stakeholder perspectives. The inclusion of patients, families, physicians, and other providers in a single comparative framework indicates an original effort to harmonize these distinct viewpoints. The absence of follow-up papers by the same researcher suggests that this single publication served as a definitive, standalone reference point rather than the start of a prolonged iterative series.

The significance of this contribution is evidenced by its substantial citation count of 3,470, indicating widespread adoption and influence within the field. Furthermore, analysis of citing papers reveals that 85.7% of citations originate from independent researchers, rather than the author's immediate collaborators or institution. This high degree of independent uptake strongly suggests that the work has become a standard reference for scholars across diverse institutions seeking to understand end-of-life care dynamics.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 0

#### CORE PAPER

### [Factors considered important at the end of life by patients, family, physicians, and other care providers](#)

2000 · 3,470 citations (GS)

Field-normalised: 2,499 Semantic Scholar citations place it in the top 1% of Medicine papers from 2000 indexed by Semantic Scholar, by citation count.

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

## D. Citing-Institution Prestige & Geography

### Top citing institutions

Institution	Country	World ranking	Citing papers
Harvard University	United States	SCImago #4 · THE =5 · QS 5	5
University of California San Diego	United States	SCImago #120 · THE 47 · QS 66	5
University of Michigan	United States	SCImago #43 · THE 23 · QS 45	4
New York University	United States	SCImago #116 · THE =31 · QS 55	4
University of Washington	United States	SCImago #45 · THE 25 · QS 81	3
Stanford University	United States	SCImago #18 · THE =5 · QS 3	3
Cornell University	United States	SCImago #61 · THE =18 · QS 16	3
Australian National University	Australia	SCImago #604 · THE =73 · QS =32	2
Johns Hopkins University	United States	SCImago #33 · THE 16 · QS 24	2
Potsdam Institute for Climate Impact Research	Germany	SCImago #2238	2
Yale University	United States	SCImago #76 · THE 10 · QS 21	2
University of Basel	Switzerland	SCImago #905 · THE 120 · QS 158	2
University of Colorado Denver	United States	SCImago #503 · QS 851-900	2
University of Birmingham	United Kingdom	SCImago #369 · THE =98 · QS 76	2
Boston University	United States	SCImago #272 · THE =76 · QS =88	2

### Geographic distribution of citing authors

Country	Citing papers
United States	60
United Kingdom	13
Netherlands	11
Italy	8
Germany	7
Australia	5
China	5
Switzerland	5
France	4
Sweden	4
Singapore	3
India	3

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.

## F. AAO Precedent Considerations

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### 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

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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	The spread of obesity in a large social network over 32 years	78	Dhanasar – Prong 2 (well-positioned)
Contribution 2	Computational social science	0	Dhanasar – Prong 2 (well-positioned)
Contribution 3	Factors considered important at the end of life by patients, family, physicians, and other care providers	0	Dhanasar – Prong 2 (well-positioned)