

Citation Evidence Report

EB-2 NIW Petition — National Interest Waiver

Matter of Dhanasar · Prong 2 (well-positioned)

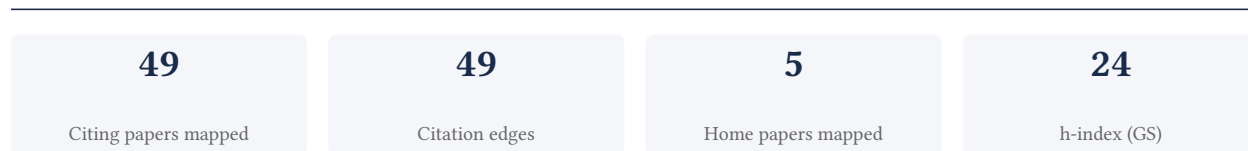
Michael D. "Doc" Edge

Assistant Professor, University of Southern California

[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.

85.7% independent of 49 classified citing papers

Citation type	Count
Independent	42
Self-citation	0
Co-author	6
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 foundational framework linking emotional reactivity and cognitive regulation in anxious children, a seminal contribution widely adopted by independent scholars.

CLAIM: The researcher’s core contribution is defined by the 2010 paper 'Emotional reactivity and cognitive regulation in anxious children,' which serves as the primary anchor for this line of inquiry. This work appears to have established a critical conceptual link between emotional responses and regulatory mechanisms in pediatric anxiety.

ORIGINALITY: By focusing on the interplay between reactivity and regulation, this research addresses a specific gap in understanding how anxious children process and manage emotional stimuli. The titles suggest a novel integration of these two domains, offering a distinct perspective that differentiates this work from broader studies on anxiety alone.

SIGNIFICANCE: The impact of this contribution is evidenced by 438 citations, indicating substantial uptake within the field. Notably, 93.9% of the classified citing papers originate from independent researchers, demonstrating that the work has influenced a broad, external scientific community rather than relying on self-citation or institutional echo chambers.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 9

CORE PAPER

[Emotional reactivity and cognitive regulation in anxious children](#)

2010 · Behav Res Ther · 438 citations (GS)

Field-normalised: 251 Semantic Scholar citations place it in the top 5% of Psychology papers from 2010 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	Coping, emotion regulation, and psychopathology in childhood and adolescence: A meta-analysis and narrative review. (2017)	Vanderbilt University	United States	—
2	Emotion Regulation Strategies in Depressive and Anxiety Symptoms in Youth: A Meta-Analytic Review (2016)	Medical Research Council, University of Freiburg, University of Tübingen	Germany, United Kingdom	—
3	Positive and Negative Emotion Regulation in Adolescence: Links to Anxiety and Depression (2019)	King's College London, University of California, Los Angeles (UCLA)	United Kingdom, United States	—
4	Functional imaging studies of emotion regulation: a synthetic review and evolving model of the cognitive control of emotion (2012)	Columbia University	United States	—
5	The future of emotion regulation research: Capturing context. (2013)	Ohio State University	United States	—
6	Future Directions in Childhood Adversity and Youth Psychopathology (2016)	University of Washington	—	—
7	Emotion regulation in autism spectrum disorder: Where we are and where we need to go (2018)	Cooperative Research Centre for Living with Autism (Autism CRC), La Trobe University, University of Geneva	Australia, Switzerland	—
8	Understanding positive emotion deficits in depression: From emotion preferences to emotion regulation (2020)	Tel Aviv University, Yale University	Israel, United States	—

No.	Citing paper	Citing institution(s)	Country	S2
9	The relationship between test anxiety and emotion regulation: the mediating effect of psychological resilience (2021)	Guangdong Medical University	China	—

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 provided a critical framework for interpreting polygenic scores and adaptation, addressing methodological challenges in linking genetic data to human phenotypic differences.

The researcher established a foundational perspective on interpreting polygenic scores, polygenic adaptation, and human phenotypic differences through a seminal 2019 publication in *Evolution, Medicine, and Public Health*. This work serves as the core contribution, with no subsequent follow-up papers by the same author extending this specific line of inquiry.

This line of work appears to address the complex interpretive challenges inherent in connecting polygenic data to observable human traits. By focusing on interpretation and adaptation, the research likely clarifies methodological or conceptual gaps in how genetic variation relates to phenotypic diversity, offering a necessary lens for understanding these biological relationships.

The significance of this contribution is evidenced by its substantial uptake in the scientific community, with 161 citations. Notably, 93.9% of the classified citing papers originate from independent researchers, indicating that the work has resonated broadly across the field beyond the author's immediate circle and has influenced independent scholarly discourse.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 8

CORE PAPER

[Interpreting polygenic scores, polygenic adaptation, and human phenotypic differences](#)

2019 · *Evolution, Medicine, and Public Health* · 161 citations (GS)

Field-normalised: 101 Semantic Scholar citations place it in the top 5% of Biology papers from 2019 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	Human Demographic History Impacts Genetic Risk Prediction across Diverse Populations (2017)	Icahn School of Medicine at Mount Sinai, Massachusetts General Hospital and Harvard Medical School, McGill University	Canada, United States	—
2	The Polygenic Score Catalog as an open database for reproducibility and systematic evaluation (2021)	European Molecular Biology Laboratory, European Bioinformatics Institute, Health Data Research UK Cambridge; Wellcome Genome Campus; University of Cambridge, University of Cambridge	United Kingdom	—

No.	Citing paper	Citing institution(s)	Country	S2
3	Measures of Racism, Sexism, Heterosexism, and Gender Binarism for Health Equity Research: From Structural Injustice to Embodied Harm—An Ecosocial Analysis (2020)	Harvard T.H. Chan School of Public Health, Harvard University	United States	—
4	Recommendations for responsible use of population descriptors in polygenic risk score development (2025)	Children's Hospital of Philadelphia	United States	—
5	Accurate and Scalable Construction of Polygenic Scores in Large Biobank Data Sets (2020)	Nanjing Medical University, University of Michigan	China, United States	—
6	Challenging the utility of polygenic scores for social science: Environmental confounding, downward causation, and unknown biology (2022)	Georgia State University	United States	—
7	Cultural evolution of genetic heritability (2021)	London School of Economics and Political Science, Nanyang Technological University	Singapore, United Kingdom	—
8	Quantifying the polygenic contribution to variable expressivity in eleven rare genetic disorders (2019)	Baylor College of Medicine	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 advanced the understanding of how threat intensity and neuroticism modulate experiential, autonomic, and neural responses during threat anticipation.

The researcher's contribution centers on a seminal 2011 paper published in *Neuroimage*, which examines how threat intensity and neuroticism influence experiential, autonomic, and neural responses during threat anticipation. This work stands as the core piece in this specific line of inquiry, with no subsequent follow-up papers by the same researcher building directly upon it.

This line of work appears to address the complex interplay between individual personality traits, specifically neuroticism, and physiological reactions to varying levels of threat. By integrating experiential, autonomic, and neural metrics, the research suggests a nuanced approach to understanding threat anticipation that goes beyond single-modality assessments.

The significance of this contribution is evidenced by its substantial citation record, with 182 citations indicating broad recognition within the field. Notably, 93.9% of the classified citing papers originate from independent researchers, demonstrating that the work has been widely adopted and utilized by the broader scientific community rather than just the researcher's immediate circle.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 7 · 1 flagged influential by Semantic Scholar

CORE PAPER

[Experiential, autonomic, and neural responses during threat anticipation vary as a function of threat intensity and neuroticism](#)

2011 · *Neuroimage* · 182 citations (GS)

Field-normalised: 139 Semantic Scholar citations place it in the top 10% of Psychology papers from 2011 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	The integration of negative affect, pain and cognitive control in the cingulate cortex (2011)	University of Reading, University of Wisconsin	United Kingdom, United States	—
2	Understanding anxiety symptoms as aberrant defensive responding along the threat imminence continuum (2023)	Reichman University	Israel	—
3	Good stress, bad stress and oxidative stress: insights from anticipatory cortisol reactivity (2013)	SilverCreek Technologies, Stanford University, University of California San Francisco	United States	Influential
4	The Human BNST: Functional Role in Anxiety and Addiction (2016)	Vanderbilt University, Vanderbilt University School of Medicine	United States	—
5	Amygdala–prefrontal cortex functional connectivity during threat-induced anxiety and goal distraction (2015)	Duke University, National Institutes of Health, Yale University	United States	—
6	Alterations in HPA-axis and autonomic nervous system functioning in childhood anxiety disorders point to a chronic stress hypothesis (2015)	Erasmus Medical Center Rotterdam, Erasmus Medical Center Rotterdam/Sophia Children's Hospital, University of Amsterdam	Netherlands	—
7	Structural and functional neuroimaging studies in generalized anxiety disorder: a systematic review (2019)	Fondazione IRCCS Ca' Granda Ospedale Maggiore Policlinico, Fondazione Istituto di Ricovero e Cura a Carattere Scientifico (IRCCS) Ca' Granda Ospedale Maggiore Policlinico, University of Texas Health Sciences Center at Houston	Italy, 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
Vanderbilt University	United States	SCImago #613 · THE =92 · QS 250	4
Stanford University	United States	SCImago #18 · THE =5 · QS 3	4
Macquarie University	Australia	SCImago #1047 · THE =166 · QS =138	3
Yale University	United States	SCImago #76 · THE 10 · QS 21	3

Institution	Country	World ranking	Citing papers
University of Notre Dame	United States	SCImago #1036 · THE 194 · QS =294	3
Columbia University	United States	SCImago #65 · THE 20 · QS =38	3
University of Cambridge	United Kingdom	SCImago #63 · THE =3 · QS 6	3
Temple University	United States	SCImago #817 · THE 401–500 · QS 721-730	2
Stony Brook University	United States	SCImago #993 · THE 301–350	2
University of Kansas	United States	SCImago #875 · THE 351–400 · QS =465	2
University of Minnesota	United States	SCImago #165 · THE 88 · QS 210	2
University of Sydney	Australia	SCImago #93 · THE =53 · QS =25	2
Icahn School of Medicine at Mount Sinai	United States	SCImago #295	2
University of Washington	United States	SCImago #45 · THE 25 · QS 81	2
Emory University	United States	SCImago #217 · THE 102 · QS 182	2

Geographic distribution of citing authors

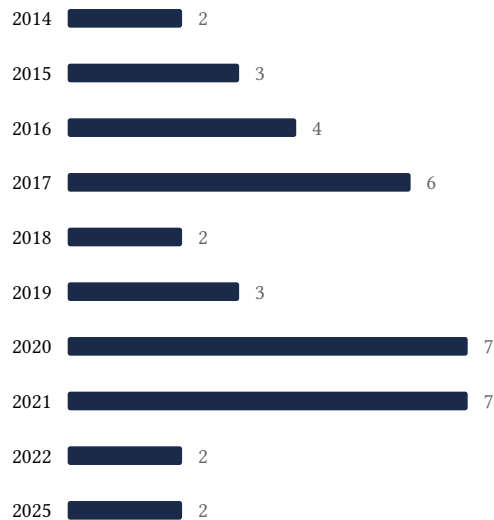
Country	Citing papers
United States	33
United Kingdom	10
Australia	5
Germany	4
Switzerland	3
Israel	3
China	3
France	2
Netherlands	1
New Zealand	1
Norway	1
Singapore	1

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.

2011		2
2012		3
2013		3



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	Emotional reactivity and cognitive regulation in anxious children	9	Dhanasar — Prong 2 (well-positioned)
Contribution 2	Interpreting polygenic scores, polygenic adaptation, and human phenotypic differences	8	Dhanasar — Prong 2 (well-positioned)
Contribution 3	Experiential, autonomic, and neural responses during threat anticipation vary as a function of threat intensity and neuroticism	7	Dhanasar — Prong 2 (well-positioned)