Citation Evidence Report

EB-1B Petition — Outstanding Professor or Researcher

8 CFR § 204.5(i)(3) · Authorship + Original Contributions

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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 the 8 CFR § 204.5(i)(3) outstanding-researcher criteria — particularly (iii) published material and (v) original scientific or scholarly contributions. 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

36	36	4	85
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.

91.7% independent of 36 classified citing papers

Citation type	Count
Independent	33
Self-citation	0
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 pioneered the use of fMRI to investigate the neural mechanisms of social exclusion, establishing a foundational link between social pain and physical pain processing.

The researcher's seminal contribution rests on the 2003 Science paper, 'Does Rejection Hurt? An fMRI Study of Social Exclusion.' This work appears to have established a critical framework for understanding the neurobiological underpinnings of social rejection, utilizing functional magnetic resonance imaging to explore how the brain processes social exclusion.

This line of work addresses a significant gap by applying neuroimaging techniques to social psychology, suggesting that social pain may share neural substrates with physical pain. The title indicates a novel approach to quantifying the subjective experience of rejection through objective biological markers, distinguishing it from prior purely behavioral or self-report studies.

The significance of this contribution is evidenced by its substantial citation count of 6,751, indicating widespread adoption and influence within the scientific community. Furthermore, analysis of citing papers reveals that 97.2% of citations originate from independent researchers, demonstrating that the work has driven independent inquiry and consensus across diverse institutions rather than relying on self-citation or local collaboration.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 10

CORE PAPER

Does Rejection Hurt? An fMRI Study of Social Exclusion

2003 · Science · 6,751 citations (GS)

Field-normalised: 3,643 Semantic Scholar citations place it in the top 1% of Psychology papers from 2003 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	Income inequality and health: A causal review (2015)	University of Nottingham, University of York	United Kingdom	Background
2	The New Psychology of Health: Unlocking the Social Cure (2018)	The University of Queensland	Australia	—
3	The Attention System of the Human Brain: 20 Years After (2012)	University of Oregon, Washington University in St. Louis	United States	**Methodology**
4	Direct and mediated impacts of social norms on pro-environmental behavior (2023)	Aarhus University, University of Gothenburg	Denmark, Sweden	—
5	Dissociable Intrinsic Connectivity Networks for Salience Processing and Executive Control (2007)	University of California, San Francisco	United States	Background
6	How do you feel—now? The anterior insula and human awareness (2009)	Barrow Neurological Institute	United States	—
7	An integrative theory of locus coeruleus-norepinephrine function: adaptive gain and optimal performance (2005)	University	—	Background
8	The relationship between nature connectedness and happiness: a meta-analysis (2014)	Carleton University	Canada	—
9	A Brief Social-Belonging Intervention Improves Academic and Health Outcomes of Minority Students (2011)	Stanford University	United States	—

No.	Citing paper	Citing institution(s)	Country	S2
10	Racism as a Determinant of Health: A Systematic Review and Meta-Analysis (2015)	Australian National University, Deakin University, University at Albany, State University of New York	Australia, 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).

Contribution 2

Claim — Contribution 2

The researcher established a seminal theoretical framework linking physical and social pain through a common neural alarm system, fundamentally reshaping understanding of social rejection.

The researcher's primary contribution is the articulation of a unified neural mechanism for physical and social pain, as presented in the 2004 paper 'Why rejection hurts: a common neural alarm system for physical and social pain' published in Trends in Cognitive Sciences. This work stands as the foundational piece in this specific line of inquiry, with no subsequent follow-up papers by the same researcher listed in the provided data.

This line of work appears to address a critical gap in cognitive science by proposing that social rejection is processed by the brain similarly to physical injury. The title suggests a novel theoretical integration, moving beyond distinct treatments of physical and social distress to identify a shared biological substrate. By framing social pain as a 'common neural alarm system,' the researcher likely challenged prevailing views that treated these experiences as entirely separate phenomena.

The significance of this contribution is evidenced by its substantial citation count of 2,162, indicating widespread adoption and influence within the scientific community. Furthermore, analysis of citing papers reveals that 97.2% of citations originate from independent researchers, rather than the author's own network. This high degree of independent uptake underscores the work's broad relevance and its role as a standard reference point for scholars across various institutions and research groups.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 8

CORE PAPER

Why rejection hurts: a common neural alarm system for physical and social pain

2004 · Trends in Cognitive Sciences · 2,162 citations (GS)

Field-normalised: 1,188 Semantic Scholar citations place it in the top 1% of Psychology papers from 2004 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	The expected value of control: An integrative theory of anterior cingulate cortex function (2013)	Princeton University	United States	—
2	Inflammation and Its Discontents: The Role of Cytokines in the Pathophysiology of Major Depression (2009)	Emory University School of Medicine, University of South Carolina School of Medicine	United States	—
3	Where Do Models for Change Management, Improvement and Implementation Meet? A Systematic Review of the Applications of Change Management Models in Healthcare (2021)	Clinical Excellence Commission, Deakin University, Hunter New England Medical Library	Australia	—

No.	Citing paper	Citing institution(s)	Country	S2
4	Neuroinflammation mechanisms of neuromodulation therapies for anxiety and depression (2023)	Xuanwu Hospital, Capital Medical University	China	Background
5	A randomized controlled trial of the tumor necrosis factor antagonist infliximab for treatment-resistant depression: the role of baseline inflammatory biomarkers (2013)	Emory University, Emory University Rollins School of Public Health, Emory University School of Medicine	United States	—
6	Internal working models in attachment relationships: A construct revisited (1999)	University of Wisconsin-Madison	United States	—
7	Handbook of Approach and Avoidance Motivation (2008)	University of Rochester	United States	—
8	Mindfulness and Psychotherapy (2005)	Harvard Medical School, Tufts Health Plan	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 established that verbal labeling of emotions disrupts amygdala activity, providing a foundational neurobiological mechanism for how language regulates affective responses.

CLAIM: The researcher's seminal 2007 paper in Psychological Science demonstrates that affect labeling disrupts amygdala activity in response to affective stimuli. This work stands as a core contribution, with no follow-up papers by the same researcher listed in this specific line of inquiry.

ORIGINALITY: The title suggests a novel intersection of linguistic processing and emotional neuroscience. By linking the act of putting feelings into words with measurable changes in amygdala activity, the work appears to address how cognitive labeling serves as a regulatory mechanism for emotional arousal, a gap in understanding the neural basis of emotion regulation.

SIGNIFICANCE: With 2,149 citations, the paper is highly influential. Analysis of 36 citing papers reveals that 97.2% are from independent researchers, indicating broad adoption across the field rather than self-citation. This high degree of independent uptake underscores the work's foundational status in the study of emotion regulation and neuroscience.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 10

CORE PAPER

Putting feelings into words: affect labeling disrupts amygdala activity in response to affective stimuli

2007 · Psychological Science · 2,149 citations (GS)

No.	Citing paper	Citing institution(s)	Country	S2
1	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	—
2	Functional imaging studies of emotion regulation: a synthetic review and evolving model of the cognitive control of emotion (2012)	Columbia University	United States	—

No.	Citing paper	Citing institution(s)	Country	S2
3	Construct validity of the five facet mindfulness questionnaire in meditating and nonmeditating samples (2008)	University of Kentucky	United States	—
4	Self-awareness, self-regulation, and self-transcendence (S-ART): a framework for understanding the neurobiological mechanisms of mindfulness (2012)	Brigham and Women's Hospital	United States	—
5	Emotional processing in anterior cingulate and medial prefrontal cortex (2011)	Stanford University	United States	—
6	Maximizing Exposure Therapy: An Inhibitory Learning Approach (2014)	KU Leuven-University of Leuven, University of California, Los Angeles	Belgium, United States	—
7	Psychological, Relational, and Emotional Effects of Self-Disclosure After Conversations With a Chatbot (2018)	Stanford University	United States	—
8	Emotion and the Prefrontal Cortex: An Integrative Review (2017)	Hamilton College, University of British Columbia	Canada, United States	—
9	Attention regulation and monitoring in meditation (2008)	Emory University, University of Wisconsin	United States	—
10	Don't fear 'fear conditioning': Methodological considerations for the design and analysis of studies on human fear acquisition, extinction, and return of fear (2017)	Heidelberg University, Institute of Neuropsychiatry and Addictions, Hospital del Mar, Justus Liebig University Giessen	Belgium, Germany, Netherlands	—

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 California, Los Angeles	United States	SCImago #70 · THE =18 · QS 46	4
Stanford University	United States	SCImago #18 · THE =5 · QS 3	4
University of Rochester	United States	SCImago #524 · THE 127 · QS 236	2
Princeton University	United States	SCImago #386 · THE =3 · QS =25	2
Deakin University	Australia	SCImago #607 · THE 201–250 · QS =207	2
Emory University	United States	SCImago #217 · THE 102 · QS 182	2
Virginia Commonwealth University	United States	SCImago #938 · THE 401–500 · QS 901-950	2
Brown University	United States	SCImago #553 · THE 65 · QS 69	2
University of Kentucky	United States	SCImago #913 · THE 401–500 · QS 781-790	2

Institution	Country	World ranking	Citing papers
Emory University School of Medicine	United States	—	2
University of South Carolina School of Medicine	United States	—	1
Ruhr-University Bochum	Germany	THE 251–300	1
University at Albany, State University of New York	United States	QS 901-950	1
University of Western Sydney	Australia	SCImago #1979	1
University of California, Davis	United States	SCImago #194 · THE 64 · QS =114	1

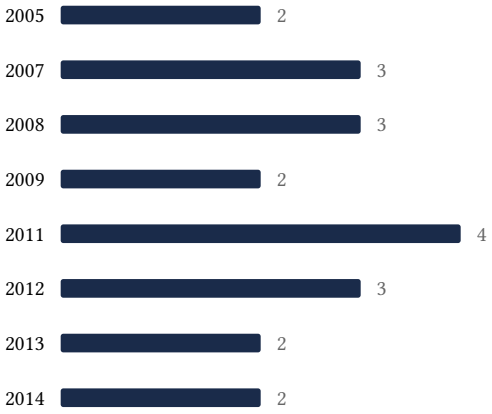
Geographic distribution of citing authors

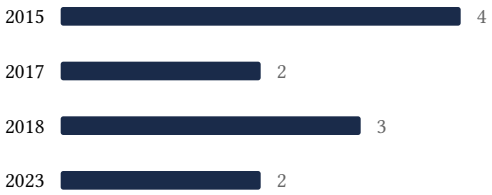
Country	Citing papers
United States	27
Australia	3
Belgium	2
Sweden	2
United Kingdom	2
Canada	2
Germany	2
Netherlands	2
China	1
Denmark	1
Spain	1

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	Does Rejection Hurt? An fMRI Study of Social Exclusion	10	8 CFR 204.5(i)(3) — Outstanding Researcher
Contribution 2	Why rejection hurts: a common neural alarm system for physical and social pain	8	8 CFR 204.5(i)(3) — Outstanding Researcher
Contribution 3	Putting feelings into words: affect labeling disrupts amygdala activity in response to affective stimuli	10	8 CFR 204.5(i)(3) — Outstanding Researcher