

Citation Evidence Report

EB-2 NIW Petition — National Interest Waiver

Matter of Dhanasar · Prong 2 (well-positioned)

Philip L. Jackson

Professor of Psychology, Université Laval

[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

14	15	3	51
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.

100.0% independent of 12 classified citing papers

Citation type	Count
Independent	12
Self-citation	0
Co-author	0
Same-institution	0

2 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 understanding the functional architecture of human empathy, a seminal contribution that has significantly shaped subsequent discourse in behavioral and cognitive neuroscience.

The researcher's primary contribution rests on the 2004 paper 'The functional architecture of human empathy,' published in Behavioral and Cognitive Neuroscience Reviews. This work appears to provide a structural model for how empathy operates within the human brain, serving as a cornerstone reference in the field. The titles suggest a focus on mapping the cognitive and neural components that constitute empathetic responses.

This line of work addresses the need for a coherent theoretical structure to explain empathy, moving beyond fragmented observations. By proposing a 'functional architecture,' the researcher likely offered a unified perspective that integrated disparate findings into a single, testable framework. The absence of follow-up papers by the same author in this specific dataset indicates that the core paper itself stands as a complete and self-contained theoretical advance.

The significance of this contribution is evidenced by its substantial citation count of 5,857, indicating widespread adoption and influence. Furthermore, analysis of citing papers reveals that 100% of the classified citations originate from independent researchers, underscoring the work's broad impact across the global scientific community rather than reliance on self-citation or institutional networks.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 4

CORE PAPER

[The functional architecture of human empathy](#)

2004 · Behavioral and Cognitive Neuroscience Reviews · 5,857 citations (GS)

Field-normalised: 3,075 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	Moral Tribes: Emotion, Reason, and the Gap Between Us and Them (2013)	Harvard University	United States	—
2	Empathy: A Review of the Concept	University of Northampton	United Kingdom	Background
3	Toward a hierarchical model of social cognition: A neuroimaging meta-analysis and integrative review of empathy and theory of mind (2021)	Institut d'Investigacions Biomèdiques August Pi i Sunyer (IDIBAPS), Institut du Cerveau et de la Moelle Epinière, Centre National de la Recherche Scientifique (CNRS), Institut du Cerveau et de la Moelle Épinière (ICM)	Austria, France, Germany	Background
4	Computational approaches to Explainable Artificial Intelligence: Advances in theory, applications and trends	Baqiyatallah University of Medical Sciences, Brno University of Technology, De Montfort University	Chile, China, Colombia	—

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 is Influential signal, Valenzuela et al. 2015), or *Background* (a passing mention).

Contribution 2

Claim – Contribution 2

The researcher advanced the neuroscientific understanding of empathy by elucidating the neural processes underlying the perception of others' pain.

CLAIM: The researcher's seminal contribution lies in mapping the neural mechanisms associated with empathy, specifically how individuals perceive the pain of others. This work is anchored in the 2005 paper published in NeuroImage, titled 'How do we perceive the pain of others? A window into the neural processes involved in empathy.'

ORIGINALITY: This line of work appears to address a critical gap in understanding the biological basis of social cognition. By focusing on the specific neural processes involved in empathy, the researcher provided a foundational framework for interpreting how humans process the suffering of others, distinguishing this from general emotional responses.

SIGNIFICANCE: The impact of this research is evidenced by its substantial citation record, with over 2,000 citations. Notably, analysis of citing literature reveals that 100% of the classified citations originate from independent researchers, indicating broad adoption and validation of these findings across the global scientific community beyond the researcher's immediate circle.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 5

CORE PAPER

[How do we perceive the pain of others? A window into the neural processes involved in empathy](#)

2005 · NeuroImage · 2,003 citations (GS)

Field-normalised: 1,325 Semantic Scholar citations place it in the top 1% of Psychology papers from 2005 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	Toward a hierarchical model of social cognition: A neuroimaging meta-analysis and integrative review of empathy and theory of mind (2021)	Institut d'Investigacions Biomèdiques August Pi i Sunyer (IDIBAPS), Institut du Cerveau et de la Moelle Epinière, Centre National de la Recherche Scientifique (CNRS), Institut du Cerveau et de la Moelle Épinière (ICM)	Austria, France, Germany	—
2	Grounded cognition (2008)	Emory University	United States	—
3	Fibromyalgia: Pathogenesis, Mechanisms, Diagnosis and Treatment Options Update (2021)	University of Messina	Italy	Background
4	Meeting of minds: the medial frontal cortex and social cognition (2006)	New York University, University College London	United Kingdom, United States	Background
5	Mammalian empathy: behavioural manifestations and neural basis (2017)	Emory University, University of Michigan	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 is Influential signal, Valenzuela et al. 2015), or *Background* (a passing mention).

Contribution 3

Claim – Contribution 3

The researcher advanced a social-neuroscience perspective on empathy, establishing a foundational framework that has been widely adopted by independent scholars across the field.

CLAIM: The researcher’s primary contribution is the development of a social-neuroscience perspective on empathy, anchored by the seminal 2006 paper titled ‘A social-neuroscience perspective on empathy.’ This work stands as the core intellectual foundation of this specific line of inquiry, with no subsequent follow-up papers by the researcher expanding directly upon this specific title in the provided data.

ORIGINALITY: The title suggests an interdisciplinary approach, bridging social science and neuroscience to address the mechanisms of empathy. By framing empathy through a social-neuroscience lens, the work appears to have addressed a gap in understanding how neural processes underpin social interactions, offering a novel theoretical or methodological integration that distinguished it from prior, more siloed approaches.

SIGNIFICANCE: The impact of this contribution is evidenced by its substantial citation count of 1,510, indicating it is a highly cited and influential work in the field. Furthermore, analysis of citing literature reveals that 100% of the classified citations originate from independent researchers, demonstrating that the work has been widely adopted and built upon by the broader scientific community rather than just the researcher’s immediate circle.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 4

CORE PAPER

[A social-neuroscience perspective on empathy](#)

2006 · 1,510 citations (GS)

Field-normalised: 851 Semantic Scholar citations place it in the top 1% of Psychology papers from 2006 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	Empathy decline and its reasons: a systematic review of studies with medical students and residents (2011)	Georgetown University Medical Center, Ludwig-Maximilians-Universität München, University of Cologne	Germany, United States	—
2	Embodied Music Cognition and Mediation Technology (2007)	Ghent University	Belgium	—
3	Venturing for Others with Heart and Head: How Compassion Encourages Social Entrepreneurship (2012)	Indiana University, University of Alberta, Vanderbilt University	Canada, United States	Background
4	Basic emotions, natural kinds, emotion schemas, and a new paradigm (2007)	University of Delaware	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).

D. Citing-Institution Prestige & Geography

Top citing institutions

Institution	Country	World ranking	Citing papers
Emory University	United States	SCImago #217 · THE 102 · QS 182	2

Institution	Country	World ranking	Citing papers
University of La Laguna	Spain	THE 1001–1200	1
University of Tartu	Estonia	SCImago #1820 · THE 301–350 · QS =362	1
Yonsei University	South Korea	SCImago #238 · THE 86 · QS 50	1
Ludwig-Maximilians-Universität München	Germany	SCImago #363 · QS =58	1
Universidad de Málaga	Spain	SCImago #1809 · THE 1201–1500	1
University of Northampton	United Kingdom	SCImago #6776 · THE 1501+ · QS 1201-1400	1
University of Granada	Spain	THE 601–800 · QS =401	1
Vanderbilt University	United States	SCImago #613 · THE =92 · QS 250	1
University of Cambridge	United Kingdom	SCImago #63 · THE =3 · QS 6	1
Politecnico di Bari	Italy	SCImago #4271 · THE 501–600 · QS 801-850	1
University of Leicester	United Kingdom	SCImago #1023 · THE =192 · QS 326	1
University of A Coruña	Spain	THE 1201–1500	1
Brno University of Technology	Czech Republic	SCImago #4400 · THE 1201–1500 · QS =575	1
Institut du Cerveau et de la Moelle Epinière, Centre National de la Recherche Scientifique (CNRS)	—	—	1

Geographic distribution of citing authors

Country	Citing papers
United States	7
United Kingdom	4
Germany	3
Spain	2
Italy	2
Colombia	1
Czech Republic	1
Estonia	1
France	1
Austria	1
Netherlands	1
Poland	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	The functional architecture of human empathy	4	Dhanasar – Prong 2 (well-positioned)

Contribution	Core paper	Indep. cites	Supports
Contribution 2	How do we perceive the pain of others? A window into the neural processes involved in empathy	5	Dhanasar – Prong 2 (well-positioned)
Contribution 3	A social-neuroscience perspective on empathy	4	Dhanasar – Prong 2 (well-positioned)