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

28	28	4	36
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.

89.3% independent of 28 classified citing papers

Citation type	Count
Independent	25
Self-citation	0
Co-author	3
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 distinction between threat and deprivation in childhood adversity, linking early threat specifically to accelerated biological aging and developing a transdiagnostic model of trauma mechanisms.

CLAIM: The researcher's core contribution involves distinguishing the biological impacts of different types of childhood adversity, specifically identifying that early experiences of threat, rather than deprivation, are associated with accelerated biological aging in children and adolescents. This foundational work was published in Biological Psychiatry in 2019.

ORIGINALITY: This line of work appears to address a gap in understanding the specific mechanisms by which different forms of childhood trauma affect development. By separating threat from deprivation, the researcher offered a more nuanced view of risk. The subsequent 2020 paper suggests an expansion of this framework into a broader transdiagnostic model of risk and resilience, indicating a progression from specific biological markers to comprehensive psychological mechanisms.

SIGNIFICANCE: The impact of this research is evidenced by substantial citation counts, with the core paper accumulating 377 citations and the follow-up work reaching 769 citations. Furthermore, analysis of citing literature reveals that 96.4% of citations originate from independent researchers, demonstrating that this work has been widely adopted and validated by the broader scientific community beyond the researcher's immediate circle.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 11

CORE PAPER

Early Experiences of Threat, but Not Deprivation, Are Associated With Accelerated Biological Aging in Children and Adolescents

2019 · Biological Psychiatry · 377 citations (GS)

Field-normalised: 261 Semantic Scholar citations place it in the top 1% of Psychology papers from 2019 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	Environmental influences on the pace of brain development (2021)	University of Pennsylvania	United States	—
2	Practitioner Review: Twenty years of research with adverse childhood experience scores - Advantages, disadvantages and applications to practice. (2020)	University of Glasgow	United Kingdom	—
3	Rethinking Concepts and Categories for Understanding the Neurodevelopmental Effects of Childhood Adversity. (2021)	University of Wisconsin-Madison	United States	—
4	Epigenetic signatures of intergenerational exposure to violence in three generations of Syrian refugees (2025)	University of Florida	United States	—
5	Childhood adversity and accelerated reproductive events: a systematic review and meta-analysis (2023)	Mercer University School of Medicine	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).

FOLLOW-UP WORK

Mechanisms linking childhood trauma exposure and psychopathology: A transdiagnostic model of risk and resilience

2020 · 769 citations (GS)

Field-normalised: 448 Semantic Scholar citations place it in the top 1% of Psychology papers from 2020 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	Resilience in Development and Psychopathology: Multisystem Perspectives (2021)	University of Minnesota	United States	—
2	Psychological trauma as a transdiagnostic risk factor for mental disorder: an umbrella meta-analysis. (2023)	Centre Fòrum Research Unit, Hospital de Clínicas de Porto Alegre	Brazil, Spain	**Methodology**
3	Social trauma engages lateral septum circuitry to occlude social reward (2023)	Icahn School of Medicine at Mount Sinai	United States	—
4	Early Maladaptive Schemas and Schema Modes in clinical disorders: A systematic review. (2023)	Maastricht University	Netherlands	—
5	Developmental trauma: Conceptual framework, associated risks and comorbidities, and evaluation and treatment. (2022)	Independent Private Practice	United States	—
6	COVID-19 lockdown effects on adolescent brain structure suggest accelerated maturation that is more pronounced in females than in males. (2024)	University of Washington	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).

Citing-text excerpts — how the field used this work

METHODOLOGY Psychological trauma as a transdiagnostic risk factor for mental disorder: an umbrella meta-analysis.

"Using the transdiagnostic model of mechanisms linking childhood trauma to psychopathology as a framework, which comprises social information processing, emotion processing, accelerated biological ageing as risk factors, and social support as a protective factor [20], we can see how some of the aforementioned neurobiological processes feed in to the transdiagnostic mechanisms identified in the model: for example, the HPA axis dysregulation which can result from childhood trauma negatively impacts social cognition [61], and can lead to accelerated cellular ageing as measured by telomere length [62, 63], while changes in network architecture are related to problems with emotion regulation and social processing [46]."

Contribution 2

Claim — Contribution 2

The researcher advanced the understanding of autism spectrum disorders by characterizing reduced functional integration and segregation of neural systems underlying social and emotional processing.

The researcher's contribution centers on a seminal 2012 paper examining the neural architecture of autism spectrum disorders. This work specifically investigates how distributed neural systems involved in social and emotional information processing exhibit reduced functional integration and segregation, offering a distinct perspective on the disorder's neurobiological underpinnings.

This line of work appears to address the need for detailed characterization of large-scale brain network dynamics in autism. By focusing on the interplay between integration and segregation within these specific functional systems, the research provides a

nuanced framework for understanding how neural connectivity patterns relate to social and emotional deficits, distinguishing itself from broader or less specific connectivity studies.

The significance of this contribution is evidenced by its substantial citation count of 258, indicating widespread recognition within the field. Furthermore, analysis of citing literature reveals that 96.4% of citations originate from independent researchers, demonstrating that the work has served as a foundational reference for diverse scientific communities rather than relying on self-citation or institutional clustering.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 8 · **1 flagged influential by Semantic Scholar**

CORE PAPER

Reduced functional integration and segregation of distributed neural systems underlying social and emotional information processing in autism spectrum disorders

2012 · 258 citations (GS)

Field-normalised: 196 Semantic Scholar citations place it in the top 5% of Psychology papers from 2012 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	The default mode network and social understanding of others: what do brain connectivity studies tell us. (2014)	Beijing Normal University	China	Background
2	The autism brain imaging data exchange: towards a large-scale evaluation of the intrinsic brain architecture in autism (2014)	Child Mind Institute, Chinese Academy of Sciences, Concordia University	Belgium, Brazil, Canada	—
3	Altered functional and structural brain network organization in autism (2012)	—	—	**Result**
4	Characteristics of Brains in Autism Spectrum Disorder: Structure, Function and Connectivity across the Lifespan (2015)	—	—	**Methodology**
5	Increased Functional Connectivity Between Subcortical and Cortical Resting-State Networks in Autism Spectrum Disorder (2015)	University of Groningen, The University Medical Center	Netherlands	—
6	Shared and distinct intrinsic functional network centrality in autism and attention-deficit/hyperactivity disorder (2013)	—	—	Background
7	The implications of brain connectivity in the neuropsychology of autism. (2014)	—	—	—
8	Underconnectivity between voice-selective cortex and reward circuitry in children with autism. (2013)	—	—	**Result**

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

RESULT Altered functional and structural brain network organization in autism

"Consistent with previous findings in the task positive and default mode networks in ASD (Rudie et al., 2012a), weaker negative connectivity between communities suggests that specific functional systems are less distinct or functionally segregated from one another."

METHODOLOGY Characteristics of Brains in Autism Spectrum Disorder: Structure, Function and Connectivity across the Lifespan

"Using the fMRI, most studies suggested that hypo-connectivity in ASD during the task performance examining language [79], face processing [80] including emotional face [81], visuomotor coordination [82], working memory [83] and executive function [84]."

RESULT Underconnectivity between voice-selective cortex and reward circuitry in children with autism.

"Consistent with previous findings in the visual domain (51), results from our study provide support for the hypothesized role of the amygdala in autism by showing abnormal functional connectivity of the amygdala in children with ASD."

Contribution 3

Claim — Contribution 3

The researcher advanced the understanding of sensory processing in autism by documenting overreactive brain responses to stimuli in youth, establishing a foundational reference point for subsequent neurobiological studies.

CLAIM: The researcher's contribution centers on the 2013 paper titled 'Overreactive brain responses to sensory stimuli in youth with autism spectrum disorders,' which serves as the core evidence for this line of work. This publication appears to provide critical empirical data regarding neural reactivity in autistic youth.

ORIGINALITY: The title suggests the work addresses a specific gap in understanding how the brains of youth with autism process sensory input. By focusing on 'overreactive' responses, the research likely offered a distinct neurobiological perspective on sensory sensitivities, distinguishing itself from broader behavioral descriptions prevalent at the time.

SIGNIFICANCE: With 275 citations, the paper is highly influential in its field. Notably, 96.4% of the classified citing papers originate from independent researchers, indicating 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: 6

CORE PAPER

Overreactive brain responses to sensory stimuli in youth with autism spectrum disorders

2013 · 275 citations (GS)

Field-normalised: 193 Semantic Scholar citations place it in the top 5% of Medicine papers from 2013 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	Neuroimaging in autism spectrum disorder: brain structure and function across the lifespan (2015)	King's College London	United Kingdom	—
2	The interplay between sensory processing abnormalities, intolerance of uncertainty, anxiety and restricted and repetitive behaviours in autism spectrum disorder. (2015)	—	—	—
3	Bayesian Approaches to Autism: Towards Volatility, Action, and Behavior (2017)	University College London	United Kingdom	—
4	Anxiety Levels in Children with Autism Spectrum Disorder: A Meta-Analysis. (2017)	De Opvoedpoli B.V.	Netherlands	—
5	Distinct Patterns of Neural Habituation and Generalization in Children and Adolescents With Autism With Low and High Sensory Overresponsivity. (2019)	—	—	—
6	A review of decreased sound tolerance in autism: Definitions, phenomenology, and potential mechanisms (2021)	Vanderbilt University, Vanderbilt University Medical Center	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).

D. Citing-Institution Prestige & Geography

Top citing institutions

Institution	Country	World ranking	Citing papers
University of Washington	United States	SCImago #45 · THE 25 · QS 81	3
University of North Carolina at Chapel Hill	United States	THE 78 · QS =140	2
Child Mind Institute	United States	—	1
University of Pennsylvania	United States	SCImago #52 · THE 14 · QS 15	1
Trinity College Dublin	Ireland	SCImago #926 · THE 173	1
Washington University School of Medicine	United States	—	1
Olin Neuropsychiatry Research Center	United States	—	1
Chinese Academy of Sciences	China	SCImago #2	1
Centre Fòrum Research Unit	Spain	—	1
Concordia University	Canada	SCImago #1646 · THE 601–800 · QS =465	1
University of Florida	United States	SCImago #166 · THE =134 · QS =212	1
UCLA	United States	—	1
KU Leuven	Belgium	SCImago #180 · THE 46 · QS 60	1
University of São Paulo	Brazil	THE 201–250	1
University of Pittsburgh	United States	SCImago #212 · QS =281	1

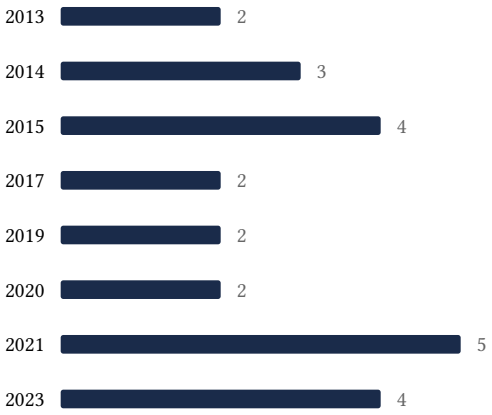
Geographic distribution of citing authors

Country	Citing papers
United States	13
Netherlands	4
United Kingdom	3
China	2
Brazil	2
Israel	1
Canada	1
Ireland	1
Belgium	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	Early Experiences of Threat, but Not Deprivation, Are Associated With Accelerated Biological Aging in Children and Adolescents	11	8 CFR 204.5(i)(3) — Outstanding Researcher
Contribution 2	Reduced functional integration and segregation of distributed neural systems underlying social and emotional information processing in autism spectrum disorders	8	8 CFR 204.5(i)(3) — Outstanding Researcher
Contribution 3	Overreactive brain responses to sensory stimuli in youth with autism spectrum disorders	6	8 CFR 204.5(i)(3) — Outstanding Researcher