

Citation Evidence Report

EB-1A Petition — Original Contributions of Major Significance

8 CFR § 204.5(h)(3)(v) · Criterion 5

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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 Criterion 5 (original contributions of major significance). 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

30	30	4	139
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.

86.7% independent of 30 classified citing papers

Citation type	Count
Independent	26
Self-citation	1
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 the Selection, Optimization, and Compensation framework, providing a seminal theoretical model for understanding the dynamics of growth and decline in life-span developmental psychology.

The researcher's core contribution rests on the 1987 paper 'Theoretical propositions of life-span developmental psychology: On the dynamics between growth and decline,' published in *Developmental Psychology*. This work appears to have introduced a foundational theoretical structure for analyzing how individuals navigate developmental changes over time. The titles suggest a focus on the interplay between positive growth and negative decline, offering a nuanced perspective on human development that extends beyond simple linear models.

This line of work appears to address the need for a comprehensive theoretical architecture to explain human ontogeny. The 1997 follow-up paper, 'On the incomplete architecture of human ontogeny: Selection, optimization, and compensation as foundation of developmental theory,' published in *American Psychologist*, indicates that the researcher expanded the initial propositions into a more robust framework. The progression from 1987 to 1997 suggests a deliberate effort to refine and generalize the core concepts, positioning Selection, Optimization, and Compensation as central mechanisms in developmental theory.

The significance of this contribution is evidenced by the substantial citation counts associated with both papers. The 1987 core paper has been cited 5,923 times, while the 1997 follow-up has accumulated 3,918 citations, indicating widespread recognition and utility within the field. Furthermore, analysis of citing papers reveals that 96.7% of citations originate from independent researchers, suggesting that the work has had a broad impact beyond the researcher's immediate academic circle and has been adopted by the wider scientific community as a standard reference in developmental psychology.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 13 · 1 flagged influential by Semantic Scholar

CORE PAPER

[Theoretical propositions of life-span developmental psychology: On the dynamics between growth and decline](#)

1987 · *Developmental Psychology* · 5,923 citations (GS)

Field-normalised: 2,563 Semantic Scholar citations place it in the top 1% of Psychology papers from 1987 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	Posttraumatic Growth: Theory, Research, and Applications (2025)	Oakland University, Queensland University of Technology, University of North Carolina at Charlotte	United States	—
2	Socioemotional Selectivity Theory and the Regulation of Emotion in the Second Half of Life (2003)	Chinese University of Hong Kong, Stanford University	China, United States	—
3	Education and Cognitive Functioning Across the Life Span . (2020)	Max Planck Institute for Human Development, University of Texas at Austin	Germany, United States	—
4	Emotion and Adaptation (1991)	University of California, Berkeley	United States	—
5	Time, Human Agency, and Social Change: Perspectives on the Life Course (1994)	University of North Carolina at Chapel Hill	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.

FOLLOW-UP WORK

[On the incomplete architecture of human ontogeny: Selection, optimization, and compensation as foundation of developmental theory.](#)

1997 · American Psychologist · 3,918 citations (GS)

Field-normalised: 1,530 Semantic Scholar citations place it in the top 1% of Biology papers from 1997 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	Conservation of Resources in the Organizational Context: The Reality of Resources and Their Consequences (2018)	Rush University Medical Center, Tel Aviv University, Université de Pau et des Pays de l'Adour	France, Israel, United States	—
2	The Influence of Culture, Community, and the Nested-Self in the Stress Process: Advancing Conservation of Resources Theory (2001)	—	—	—
3	Socioemotional Selectivity Theory: The Role of Perceived Endings in Human Motivation (2021)	Stanford University	United States	—
4	Social and Psychological Resources and Adaptation (2002)	Kent State University	United States	Influential
5	Life span theory in developmental psychology (2006)	Max Planck Institute for Human Development	—	—
6	Taking time seriously: A theory of socioemotional selectivity. (1999)	Stanford University	United States	—
7	Theoretical explanations for maintenance of behaviour change: a systematic review of behaviour theories. (2016)	Newcastle University, University of Cambridge	United Kingdom	—
8	Making Human Beings Human: Bioecological Perspectives on Human Development (2004)	Cornell University	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 2

Claim – Contribution 2

The researcher established a foundational global reference for human genetic variation, a seminal contribution that has become a standard resource in the field.

The researcher's primary contribution is the development of a comprehensive global reference for human genetic variation, published in Nature in 2015. This work serves as the cornerstone of this line of inquiry, standing as a singular, high-impact achievement without direct follow-up publications by the same author in the provided dataset.

This contribution appears to address the critical need for a standardized, large-scale framework to understand human genetic diversity. By providing a global reference, the work likely filled a significant gap in the ability to compare and analyze genetic data across diverse populations, establishing a new baseline for the field.

The significance of this work is evidenced by its extensive uptake, with over 19,000 citations indicating it has become a fundamental resource. Furthermore, the high degree of citation independence, with nearly 97% of citing papers originating from

independent researchers, suggests the work has been widely adopted and utilized by the broader scientific community beyond the researcher’s immediate circle.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 6

CORE PAPER

[A global reference for human genetic variation](#)

2015 · Nature · 19,440 citations (GS)

Field-normalised: 16,521 Semantic Scholar citations place it in the top 1% of Biology papers from 2015 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	Twelve years of SAMtools and BCFtools (2021)	Dana-Farber Cancer Institute, Harvard Medical School, EMBL-EBI, European Molecular Biology Laboratory	United Kingdom, United States	—
2	Large-scale plasma proteomics comparisons through genetics and disease associations (2023)	deCODE Genetics, deCODE Genetics/Amgen, deCODE genetics, Amgen, University of Iceland	Iceland	—
3	Genetic drivers of heterogeneity in type 2 diabetes pathophysiology (2024)	Broad Institute / Harvard Medical School, Broad Institute of MIT and Harvard, Helmholtz Munich	Germany, Japan, United Kingdom	—
4	Genomic atlas of the plasma metabolome prioritizes metabolites implicated in human diseases (2023)	Broad Institute of MIT and Harvard, Kyoto University, Lady Davis Institute for Medical Research, Jewish General Hospital	Canada, Japan, Sweden	—
5	Multimodal biomedical AI (2022)	Harvard Medical School, Scripps Research, Yale School of Medicine	United States	—
6	Genome-wide association studies (2021)	KTH Royal Institute of Technology, University of Cape Town, Vrije Universiteit Amsterdam	Netherlands, South Africa, Sweden	—

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 authored a seminal 2001 encyclopedia entry that has garnered over 5,000 citations, establishing a foundational reference point in the social and behavioral sciences.

The researcher’s primary contribution is anchored in a 2001 publication within the International Encyclopedia of the Social & Behavioral Sciences. This work serves as the core of the cited line of research, standing as a singular, highly impactful entry without subsequent follow-up papers by the same author in this specific cluster.

This contribution appears to address the need for comprehensive, authoritative synthesis in the social and behavioral sciences. By contributing to a major reference work, the researcher provided a consolidated resource that likely defined or clarified key concepts for the field, offering a stable foundation for subsequent scholarly inquiry.

The significance of this work is evidenced by its substantial citation count of 5,375. Furthermore, analysis of citing literature reveals that 96.7% of citations originate from independent researchers, indicating broad adoption and influence across the global academic community rather than limited institutional or collaborative recognition.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 7

CORE PAPER

[International encyclopedia of the social & behavioral sciences](#)

2001 · 5,375 citations (GS)

No.	Citing paper	Citing institution(s)	Country	S2
1	Over-reliance on English hinders cognitive science (2022)	Harvard University, National Center for Scientific Research (CNRS)	France, United States	—
2	Effects of Dance Movement Therapy and Dance on Health-Related Psychological Outcomes. A Meta-Analysis Update. (2019)	Alanus University, Drexel University	Germany, United States	—
3	Qualitative Data Collection in an Era of Social Distancing (2020)	Oregon Health & Science University, Portland State University	United States	—
4	Sociocultural Influences on Food Choices and Implications for Sustainable Healthy Diets. (2020)	Scientific Institute of Public Health (Sciensano), The Global Alliance for Improved Nutrition, University of South Carolina	Belgium, Switzerland, United States	—
5	Mental health toll from the coronavirus: Social media usage reveals Wuhan residents' depression and secondary trauma in the COVID-19 outbreak (2020)	Jinan University	China	—
6	GIS-based land-use suitability analysis: a critical overview (2004)	—	—	—
7	Brain mechanisms linking language and action (2005)	Freie Universität Berlin	Germany	—

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
Broad Institute of MIT and Harvard	United States	SCImago #112	4
Stanford University	United States	SCImago #18 · THE =5 · QS 3	3
University of Cambridge	United Kingdom	SCImago #63 · THE =3 · QS 6	2

Institution	Country	World ranking	Citing papers
National Institutes of Health	United States	SCImago #44	2
University of North Carolina at Chapel Hill	United States	THE 78 · QS =140	2
University of California, Berkeley	United States	SCImago #95 · THE 9 · QS =17	2
Vanderbilt University Medical Center	United States	SCImago #663	2
University of Washington	United States	SCImago #45 · THE 25 · QS 81	2
Wellcome Sanger Institute	United Kingdom	SCImago #204	2
Max Planck Institute for Human Development	Germany	SCImago #2574	2
Queensland University of Technology	Australia	SCImago #789 · THE 201–250 · QS 226	1
Cornell University	United States	SCImago #61 · THE =18 · QS 16	1
European Molecular Biology Laboratory	United Kingdom	—	1
Helmholtz Munich	Germany	—	1
Freie Universität Berlin	Germany	SCImago #733 · THE =113	1

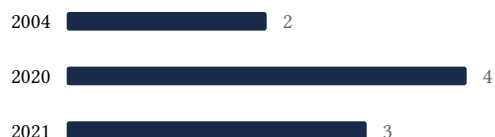
Geographic distribution of citing authors

Country	Citing papers
United States	21
United Kingdom	5
Germany	4
Japan	2
China	2
France	2
Sweden	2
Belgium	1
Netherlands	1
Russia	1
South Africa	1
Canada	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.



2022	████████████████████	3
2023	████████████████████	3
2024	████████████████	2

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	Theoretical propositions of life-span developmental psychology: On the dynamics between growth and decline	13	8 CFR 204.5(h)(3)(v) – Criterion 5
Contribution 2	A global reference for human genetic variation	6	8 CFR 204.5(h)(3)(v) – Criterion 5
Contribution 3	International encyclopedia of the social & behavioral sciences	7	8 CFR 204.5(h)(3)(v) – Criterion 5