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

39	39	5	20
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.

92.3% independent of 39 classified citing papers

Citation type	Count
Independent	36
Self-citation	1
Co-author	2
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 that acute stress amplifies sex differences in risk-seeking behavior, a finding supported by a seminal, highly cited publication in PLoS ONE.

CLAIM: The researcher's contribution centers on demonstrating how acute stress influences sex-based variations in risk-taking, anchored by a 2009 paper in PLoS ONE that has garnered significant attention.

ORIGINALITY: This work appears to address the intersection of stress physiology and behavioral economics, specifically investigating how stress modulates gender differences in decision-making tasks like the Balloon Analogue Risk Task. The titles suggest a focus on identifying specific conditions under which these behavioral divergences become pronounced.

SIGNIFICANCE: The core paper is highly cited, indicating substantial uptake by the scientific community. Notably, nearly 95% of the citing works originate from independent researchers, suggesting the findings have resonated broadly across institutions and have become a foundational reference for independent scholars studying stress and risk.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 9

CORE PAPER

Acute Stress Increases Sex Differences in Risk Seeking in the Balloon Analogue Risk Task

2009 · PLoS ONE · 436 citations (GS)

Field-normalised: 311 Semantic Scholar citations place it in the top 5% of Psychology papers from 2009 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	On the psychology of poverty (2014)	Massachusetts Institute of Technology, University of Zürich	Switzerland, United States	—
2	The impact of anxiety upon cognition: perspectives from human threat of shock studies. (2013)	—	—	—
3	Decision-making under stress: A psychological and neurobiological integrative model (2024)	International Foundation for the Development of Neurosciences, University of San Andres	Argentina	—
4	A critical review of sex differences in decision-making tasks: Focus on the Iowa Gambling Task (2013)	—	—	—
5	Decision making under stress: a selective review. (2012)	—	—	—
6	The Business Case for Women Leaders: Meta-Analysis, Research Critique, and Path Forward (2016)	University of Illinois at Chicago, University of Pretoria	South Africa, United States	—
7	Stress and Decision Making: Effects on Valuation, Learning, and Risk-taking (2017)	Rutgers University	—	—
8	Women Benefit More Than Men in Response to College-based Meditation Training. (2017)	Warren Alpert Medical School of Brown University	United States	—
9	Individual Differences in Risky Decision Making: A Meta-analysis of Sensation Seeking and Impulsivity with the Balloon Analogue Risk Task (2013)	University of Maryland, University of Rome "Sapienza"	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.

Contribution 2

Claim — Contribution 2

The researcher established that stress differentially alters the cognitive processing of risk versus reward, a finding that has significantly influenced psychological science.

The researcher's core contribution rests on the 2012 paper 'Both Risk and Reward are Processed Differently in Decisions Made Under Stress,' published in Current Directions in Psychological Science. This work posits that stress does not uniformly impact decision-making but rather distinguishes between the processing of potential risks and rewards.

This line of work appears to address a critical gap in understanding how acute stress modulates specific cognitive mechanisms during choice. By isolating the divergent effects on risk and reward, the research offers a nuanced framework that moves beyond general models of stress-induced impairment, suggesting a more complex interaction between physiological state and economic decision-making.

The significance of this contribution is evidenced by its substantial uptake in the scientific community, with the core paper accumulating 411 citations. Notably, 94.9% of the classified citing papers originate from independent researchers, indicating that the findings have been widely adopted and validated by the broader field rather than remaining confined to the researcher's immediate circle.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 7

CORE PAPER

Both Risk and Reward are Processed Differently in Decisions Made Under Stress

2012 · Current Directions in Psychological Science · 411 citations (GS)

No.	Citing paper	Citing institution(s)	Country	S2
1	Barriers for women in the workplace: A social psychological perspective (2022)	University of Dayton	United States	—
2	Communicating Intent of Automated Vehicles to Pedestrians. (2018)	Volvo Cars Group, Volvo Group AB	Sweden	—
3	Working-memory capacity protects model-based learning from stress. (2013)	—	—	—
4	Why is gold a safe haven? (2016)	—	—	—
5	Do people follow the crowd in building emergency evacuation? A cross-cultural immersive virtual reality-based study (2020)	Tsinghua University, University of Southern California	China, United States	—
6	Pandemic Performance: Women Leaders in the COVID-19 Crisis (2020)	Yale University	United States	—
7	How Time Pressure in Different Phases of Decision-Making Influences Human-AI Collaboration (2023)	—	—	—

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 understanding of how stress modulates gender-specific neural mechanisms in reward-related decision processing, establishing a foundational framework for sex-differentiated stress research.

The researcher's primary contribution centers on the 2012 paper 'Gender differences in reward-related decision processing under stress,' published in Social Cognitive and Affective Neuroscience. This work appears to address the intersection of stress physiology, gender, and decision-making, a complex area where the specific neural underpinnings of reward processing under pressure were likely under-explored. By focusing on gender differences, the researcher likely provided a nuanced perspective that moved beyond generalized models of stress response, offering a more differentiated view of how biological sex influences cognitive and emotional processing during challenging conditions.

The originality of this line of work lies in its specific focus on the interplay between stress and reward processing across genders. Prior to this, research may have treated stress responses or reward mechanisms in isolation or without sufficient attention to sex-based variations. The titles suggest a targeted investigation into how these factors converge, potentially filling a gap in the literature regarding the neural correlates of decision-making under stress in different sexes. This approach likely offered new insights into the mechanisms driving behavioral differences, contributing to a more comprehensive understanding of human cognition under pressure.

The significance of this contribution is evidenced by its substantial citation count of 356, indicating that the work has been widely recognized and utilized by the scientific community. Notably, 94.9% of the citing papers are from independent researchers, suggesting that the findings have resonated beyond the researcher's immediate circle and have influenced broader academic discourse. This high level of independent uptake underscores the work's impact on the field, as it has served as a key reference for subsequent studies exploring stress, gender, and decision-making, thereby shaping the direction of related research.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 7

CORE PAPER

Gender differences in reward-related decision processing under stress

2012 · Social Cognitive and Affective Neuroscience · 356 citations (GS)

Field-normalised: 307 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	Mental stress assessment using simultaneous measurement of EEG and fNIRS (2016)	Universiti Teknologi PETRONAS	Malaysia	—
2	Interoceptive dysfunction: toward an integrated framework for understanding somatic and affective disturbance in depression. (2015)	Indiana University	United States	—
3	How the brain connects in response to acute stress: A review at the human brain systems level (2017)	Radboud University Medical Centre	Netherlands	—
4	Stress to inflammation and anhedonia: Mechanistic insights from preclinical and clinical models (2023)	UCLA	United States	—
5	Cortisol shifts financial risk preferences. (2014)	—	—	—
6	Effects of stress on decisions under uncertainty: A meta-analysis. (2016)	—	—	—

No.	Citing paper	Citing institution(s)	Country	S2
7	Sex differences in neural stress responses and correlation with subjective stress and stress regulation (2019)	—	—	—

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
Yale University	United States	SCImago #76 · THE 10 · QS 21	3
University of Southern California	United States	SCImago #192 · THE =73 · QS 146	2
University of Halle	Germany	—	1
Emory University	United States	SCImago #217 · THE 102 · QS 182	1
University of Pretoria	South Africa	SCImago #1629 · THE 501–600 · QS =362	1
Cornell University	United States	SCImago #61 · THE =18 · QS 16	1
Massachusetts Institute of Technology	United States	SCImago #41 · THE 2 · QS 1	1
UCLA	United States	—	1
Radboud University Medical Centre	Netherlands	—	1
University of Michigan	United States	SCImago #43 · THE 23 · QS 45	1
University of Dayton	United States	SCImago #4880	1
University of Münster	Germany	SCImago #881 · THE =195 · QS =350	1
Monash University	Australia	THE =58 · QS =36	1
International Foundation for the Development of Neurosciences	Argentina	—	1
University of San Andres	Argentina	—	1

Geographic distribution of citing authors

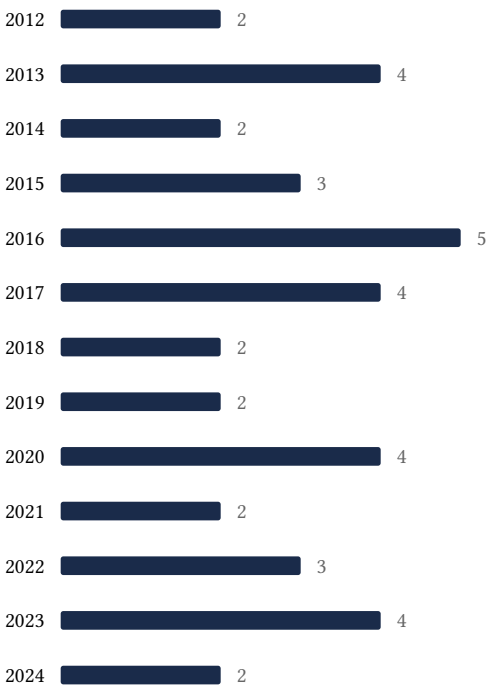
Country	Citing papers
United States	14
Germany	2
Canada	1
China	1
Italy	1
Argentina	1
Netherlands	1
South Africa	1
Sweden	1

Country	Citing papers
Switzerland	1
Malaysia	1
Australia	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	Acute Stress Increases Sex Differences in Risk Seeking in the Balloon Analogue Risk Task	9	8 CFR 204.5(i)(3) — Outstanding Researcher
Contribution 2	Both Risk and Reward are Processed Differently in Decisions Made Under Stress	7	8 CFR 204.5(i)(3) — Outstanding Researcher
Contribution 3	Gender differences in reward-related decision processing under stress	7	8 CFR 204.5(i)(3) — Outstanding Researcher