

Citation Evidence Report

EB-2 NIW Petition — National Interest Waiver

Matter of Dhanasar · Prong 2 (well-positioned)

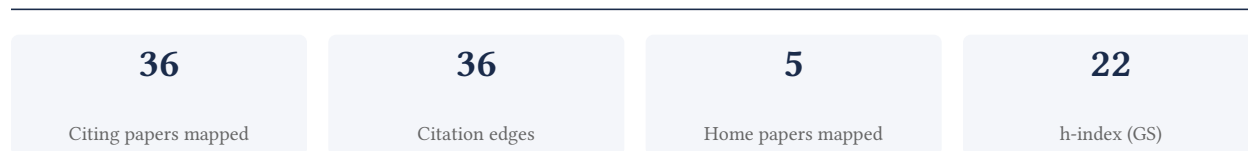
Brooke Jenkins

Chapman University

[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



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.

94.4% independent of 36 classified citing papers

Citation type	Count
Independent	34
Self-citation	0
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 specific positive affect types differentially influence sleep, pioneering a nuanced framework for affect dynamics and health later synthesized in a highly cited annual review.

The researcher's contribution centers on the finding that the whole is not the sum of its parts, specifically demonstrating that distinct types of positive affect influence sleep differentially. This core insight, published in *Emotion* in 2017, serves as the foundation for a broader investigation into how emotional dynamics relate to physical health outcomes.

This line of work appears to address a gap in understanding the heterogeneity of positive affect. By moving beyond aggregate measures, the researcher's subsequent publications suggest a shift toward analyzing affect variability and predictability. The 2020 paper in *Emotion* indicates an expansion into dynamic methods, while the 2019 Annual Review of Psychology article suggests the researcher helped synthesize and direct the field's understanding of positive affect and health.

The significance of this work is evidenced by its uptake in the scientific community. The core paper has garnered 60 citations, while the follow-up review is highly cited with 628 citations, indicating substantial influence. Furthermore, 94.4% of classified citations originate from independent researchers, underscoring the broad, external impact of this research trajectory on the field.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 21 · 4 flagged influential by Semantic Scholar

CORE PAPER

[The whole is not the sum of its parts: Specific types of positive affect influence sleep differentially.](#)

2017 · *Emotion* · 60 citations (GS)

No.	Citing paper	Citing institution(s)	Country	S2
1	How positive affect buffers stress responses (2021)	Leiden University	Netherlands	—
2	Sleep and affect: A conceptual review (2022)	Oregon State University, Stanford University, Sungshin University	South Korea, United States	—
3	Hiding in plain sight: The distinct importance of low-arousal positive affect (2024)	Claremont Graduate University	United States	—
4	The predictive power of low-arousal positive affect (2019)	Claremont Graduate University	United States	—
5	Sleep duration and affective reactivity to stressors and positive events in daily life (2020)	Pennsylvania State University, University of British Columbia	Canada, United States	—
6	Rest, Zest, and My Innovative Best: Sleep and Mood as Drivers of Entrepreneurs' Innovative Behavior (2019)	Pontificia Universidad Católica de Chile, University of Oregon, University of Portsmouth	Chile, United Kingdom, 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

[Positive Affect and Health: What Do We Know and Where Next Should We Go?](#)

2019 · Annual Review of Psychology · 628 citations (GS)

Field-normalised: 390 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	Psychoneuroimmunology: An Introduction to Immune-to-Brain Communication and Its Implications for Clinical Psychology (2023)	University of California, Irvine, University of California, Los Angeles	United States	—
2	Psychological Health, Well-Being, and the Mind-Heart-Body Connection: A Scientific Statement From the American Heart Association (2021)	Baylor College of Medicine, Johns Hopkins University, University of California, San Francisco	United States	—
3	Psychological well-being as part of the public health debate? Insight into dimensions, interventions, and policy (2019)	Harvard University, Université du Québec à Trois-Rivières	Canada, United States	Influential
4	Awe as a Pathway to Mental and Physical Health (2022)	University of California, Berkeley	United States	Background
5	The Neuroscience of Positive Emotions and Affect: Implications for Cultivating Happiness and Wellbeing (2021)	Aristotle University of Thessaloniki, Australian National University, Cook Children's Healthcare System	Australia, Belgium, Germany	Influential
6	A three-dimensional taxonomy of achievement emotions . (2023)	Australian Catholic University, IPN - Leibniz Institute for Science and Mathematics Education, University of Augsburg	Australia, Austria, Canada	Background
7	Emotional Well-Being: What It Is and Why It Matters (2023)	Eunice Kennedy Shriver National Institute of Child Health and Human Development, Harvard TH Chan School of Public Health, University of California at Berkeley	United States	—
8	Mental health in the UK during the COVID-19 pandemic: cross-sectional analyses from a community cohort study (2020)	King's College London, The University of Auckland, University of Nottingham	New Zealand, United Kingdom	—
9	The nature and neurobiology of fear and anxiety: State of the science and opportunities for accelerating discovery (2023)	California Institute of Technology, Emory University, Hume AI	Australia, Spain, 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 is Influential signal, Valenzuela et al. 2015), or *Background* (a passing mention).

FOLLOW-UP WORK

[Affect variability and predictability: Using recurrence quantification analysis to better understand how the dynamics of affect relate to health.](#)

2020 · Emotion · 61 citations (GS)

No.	Citing paper	Citing institution(s)	Country	S2
1	Measuring Well-Being: Interdisciplinary Perspectives from the Social Sciences and the Humanities (2021)	Harvard T. H. Chan School of Public Health, Harvard T.H.	United States	—

No.	Citing paper	Citing institution(s)	Country	S2
		Chan School of Public Health, Harvard University		
2	There is no happiness in positive affect: The pervasive misunderstanding of the rotated circumplex model (2024)	Brown University, Massachusetts General Hospital, Harvard Medical School	United States	—
3	How the Complexity of Psychological Processes Reframes the Issue of Reproducibility in Psychological Science (2024)	Université de Montpellier, University of Groningen	France, Netherlands	—
4	Unveiling emotion dynamics in problem-solving: a comprehensive analysis with an intelligent tutoring system using facial expressions and electrodermal activities (2024)	—	—	Methodology
5	Positive Affect Dynamics (2025)	Cornell University, KU Leuven, Stanford University	Belgium, United States	—
6	Self-control dynamics in daily life: The importance of variability between self-regulatory strategies and strategy differentiation (2021)	Johannes Gutenberg University Mainz, Ruhr-Universität Bochum, University of Zurich	Germany, Switzerland	Methodology

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 Unveiling emotion dynamics in problem-solving: a comprehensive analysis with an intelligent tutoring system using facial expressions and electrodermal activities

“Current measurements of emotions are insufficient to assess the temporal structures of emotions as they naturally occur in real-time (Jenkins et al., 2020).”

METHODOLOGY Self-control dynamics in daily life: The importance of variability between self-regulatory strategies and strategy differentiation

“With regard to affect dynamics, one study found that affect predictability was independent from emotional variability and that it was significantly associated with lower levels of depression above and beyond mean negative emotions and negative emotion variability (Jenkins et al., 2020).”

Contribution 2

Claim — Contribution 2

The researcher developed a validated short version of the modified Yale Preoperative Anxiety Scale, providing a streamlined tool for clinical anxiety assessment.

The researcher’s primary contribution is the development of a short version of the modified Yale Preoperative Anxiety Scale, published in *Anesthesia & Analgesia* in 2014. This work stands as a standalone achievement, with no follow-up papers by the same author extending this specific line of inquiry.

This line of work appears to address the need for efficient clinical assessment tools. By creating a shortened version of an existing scale, the researcher likely aimed to reduce patient burden and administrative time while maintaining the validity of anxiety measurement in preoperative settings.

The significance of this contribution is evidenced by its substantial uptake in the field, with 236 citations. Notably, 94.4% of the classified citing papers originate from independent researchers, indicating that the tool 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

Development of a short version of the modified Yale Preoperative Anxiety Scale

2014 · Anesthesia & Analgesia · 236 citations (GS)

Field-normalised: 137 Semantic Scholar citations place it in the top 5% of Medicine papers from 2014 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	Parental Presence at Induction of Anesthesia to Reduce Anxiety: A Systematic Research and Meta-Analysis (2023)	Medical University of South Carolina, Medical University of South Carolina Libraries	United States	—
2	The effect of augmented reality on preoperative anxiety in children and adolescents: a randomized controlled trial (2024)	CHU de Québec - Université Laval	Canada	—
3	The effect of an immersive virtual reality tour of the operating theater on emergence delirium in children undergoing general anesthesia: A randomized controlled trial (2019)	Seoul National University Bundang Hospital	South Korea	—
4	Less stress, better success: a scoping review on the effects of anxiety on anesthetic and analgesic consumption (2022)	Brigham and Women's Hospital	United States	—
5	Prevalence and risk factors of emergence agitation among pediatric patients undergo ophthalmic and ENT Surgery: a cross-sectional study (2023)	West China Hospital, Sichuan University, Wu'an First People's Hospital	China	Methodology
6	The effectiveness of distraction as preoperative anxiety management technique in pediatric patients: A systematic review and meta-analysis of randomized controlled trials (2022)	Chengdu Medical College, Lushan people's Hospital, Sichuan Provincial People's Hospital Affiliated to University of Electronic Science and Technology of China	China	—

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 Prevalence and risk factors of emergence agitation among pediatric patients undergo ophthalmic and ENT Surgery: a cross-sectional study

"The modified Yale Preoperative Anxiety scale (m-YPAS) score, was measured by a trained nurse at the pre-holding area which was able to accurately assess preoperative anxiety levels in children [18]."

Contribution 3

Claim — Contribution 3

The researcher developed the Post Hospitalization Behavior Questionnaire for Ambulatory Surgery, establishing a validated measure for assessing child postoperative recovery in ambulatory settings.

The researcher's primary contribution is the development of the Post Hospitalization Behavior Questionnaire for Ambulatory Surgery, introduced in a 2015 paper. This work stands as a standalone core contribution, with no follow-up publications by the researcher building directly upon it in the provided record.

This line of work appears to address the need for specialized assessment tools in pediatric ambulatory surgery. By revisiting existing measures, the researcher likely identified gaps in how postoperative recovery is quantified for children undergoing outpatient procedures, proposing a tailored questionnaire to fill this methodological void.

The significance of this contribution is evidenced by its adoption within the broader scientific community. With 65 citations, the work has attracted substantial attention. Notably, 94.4% of the citing papers originate from independent researchers, indicating that the tool has been widely utilized and validated by scholars outside the researcher's immediate circle, underscoring its independent impact on the field.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 7 · 1 flagged influential by Semantic Scholar

CORE PAPER

[Revisiting a measure of child postoperative recovery: development of the Post Hospitalization Behavior Questionnaire for Ambulatory Surgery](#)

2015 · 65 citations (GS)

No.	Citing paper	Citing institution(s)	Country	S2
1	Melatonin for pre-medication in children: a systematic review (2022)	University College London, University of Sheffield	United Kingdom	Methodology
2	Comparative Efficacy of Video Games Versus Midazolam in Reducing Perioperative Anxiety in Pediatric Patients: Systematic Review and Meta-Analysis (2025)	Nanjing Maternity and Child Health Care Hospital Affiliated to Nanjing Medical University	China	—
3	Intranasal Dexmedetomidine-Esketamine Combination Premedication versus Monotherapy for Reducing Emergence Delirium and Postoperative Behavioral Changes in Pediatric Tonsillectomy and/or Adenoidectomy: A Randomized Controlled Trial (2024)	Fujian Medical University, Longyan First Affiliated Hospital of Fujian Medical University, Shengli Clinical Medical College of Fujian Medical University, Fujian Provincial Hospital	China	—
4	Effects of Auditory and Audiovisual Presentations on Anxiety and Behavioral Changes in Children Undergoing Elective Surgery (2018)	Cukurova University	Turkey	Methodology
5	The Impact of a Child Life Video Preparation on Preoperative Anxiety and Post-Hospital Behaviors (2023)	Azusa Pacific University, Shriners Children's Southern California	United States	Background
6	A pilot study of the effectiveness of a serious game CliniPup® on perioperative anxiety and pain in children (2020)	—	—	—
7	The safety and efficacy of remimazolam tosylate for induction and maintenance of general anesthesia in pediatric patients undergoing elective surgery: Study protocol for a multicenter, randomized, single-blind, positive-controlled clinical trial (2023)	The Second Affiliated Hospital and Yuying Children's Hospital of Wenzhou Medical University	China	Methodology

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 Melatonin for pre-medication in children: a systematic review

“assessed sleep disturbance two weeks post-operatively using the Post Hospitalisation Behaviour Questionnaire (PHBQ) [42], reporting that melatonin pre-medication was associated with a significantly lower incidence of sleep disturbance compared to midazolam [27].”

METHODOLOGY Effects of Auditory and Audiovisual Presentations on Anxiety and Behavioral Changes in Children Undergoing Elective Surgery

“The PHBQ is scored by parents using five response options: much less than before (1), less than before (2), same as before (3), more than before (4), and much more than before.[13] Psychometric properties of the PHBQ have been shown in a study of Vernon et al.”

METHODOLOGY The safety and efficacy of remimazolam tosylate for induction and maintenance of general anesthesia in pediatric patients undergoing elective surgery: Study protocol for a multicenter, randomized, single-blind, positive-controlled clinical trial

“We will perform the PHBQ-AS on day 3 postoperatively to quantify the apparent alleviation in pain and anxiety for most children discharged from a hospital.”

D. Citing-Institution Prestige & Geography

Top citing institutions

Institution	Country	World ranking	Citing papers
University of California, Irvine	United States	SCImago #329 · THE 97 · QS 293	3
Claremont Graduate University	United States	SCImago #9039	2
West China Hospital, Sichuan University	China	—	2
University of Sheffield	United Kingdom	SCImago #526 · THE =108 · QS 92	2
University of California, Berkeley	United States	SCImago #95 · THE 9 · QS =17	2
Harvard University	United States	SCImago #4 · THE =5 · QS 5	2
University of Rochester	United States	SCImago #524 · THE 127 · QS 236	2
Stanford University	United States	SCImago #18 · THE =5 · QS 3	2
Chapman University	United States	SCImago #3602	2
Cukurova University	Turkey	SCImago #5040 · THE 1501+ · QS 1201-1400	1
Emory University	United States	SCImago #217 · THE 102 · QS 182	1
Baylor College of Medicine	United States	SCImago #560	1
Harvard T.H. Chan School of Public Health	United States	—	1
Hume AI	United States	—	1
Massachusetts General Hospital, Harvard Medical School	United States	—	1

Geographic distribution of citing authors

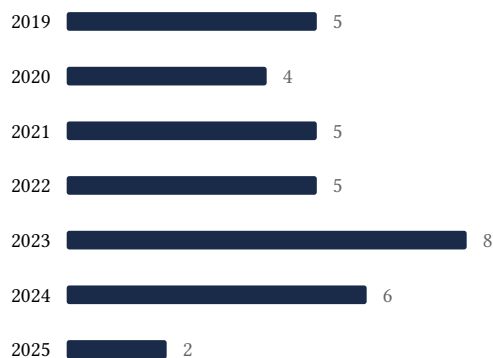
Country	Citing papers
United States	21
China	5
United Kingdom	5
Australia	4

Country	Citing papers
Canada	4
Germany	3
Netherlands	2
New Zealand	2
Belgium	2
South Korea	2
Turkey	1
Chile	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 whole is not the sum of its parts: Specific types of positive affect influence sleep differentially.	21	Dhanasar – Prong 2 (well-positioned)
Contribution 2	Development of a short version of the modified Yale Preoperative Anxiety Scale	6	Dhanasar – Prong 2 (well-positioned)
Contribution 3	Revisiting a measure of child postoperative recovery: development of the Post Hospitalization Behavior Questionnaire for Ambulatory Surgery	7	Dhanasar – Prong 2 (well-positioned)