

THESIS

THE SCIENTIFIC RIGOR OF PARENTAL ALIENATION STUDIES: A QUALITY  
ASSESSMENT OF THE PEER REVIEWED RESEARCH

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## ABSTRACT

### THE SCIENTIFIC RIGOR OF PARENTAL ALIENATION STUDIES: A QUALITY ASSESSMENT OF THE PEER REVIEWED RESEARCH

Parental Alienation (PA), a form of family violence, has negative outcomes for children and parents. Despite being a generative field of science, some critics contest the validity of PA research. Utilizing the Mixed Methods Appraisal Tool (MMAT) and building upon the Harman et al. (2022) systematic review, a comprehensive assessment of 155 studies published up to March of 2023 was conducted to examine the quality of empirical, peer-reviewed PA research. The findings indicate a consistent high level of scientific rigor in PA research, irrespective of when a study was published. The robust quality of PA research addresses several PA criticisms. By addressing concerns regarding the legitimacy of PA research meeting scientific rigor, evaluating the quality of empirical PA methodology will provide further insights regarding said scientific validity, further aiding the decision-making process for family court systems and policy makers.

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## INTRODUCTION

The characteristics of parental alienation (PA), an often-unrecognized form of child abuse, have been well documented in jurisprudence across the English-speaking world for several centuries (Lorandos, 2020). However, it was not until child psychotherapist Richard Gardner M.D. coined the term "Parental Alienation Syndrome" (PAS) in 1985 that a focused, empirical, and multidisciplinary exploration of PA began (Gardner, 1985). As with the development of any scientific field, the early stage of PA research has been characterized as a "greening" stage, where scholars delved into its attributes, facets, and defining characteristics using largely descriptive and qualitative research, followed by a "blossoming" stage, which has been marked by the emergence of a general consensus regarding the nature of PA, the development and application of significant theoretical frameworks, and increase in quantitative research (Harman et al., 2019). This evolutionary trajectory underscores the depth and breadth of research efforts aimed at comprehending PA, highlighting its significance as a subject of both academic and societal concern.

Parental alienation has been the subject of extensive research and debate over the past few decades (Bond, 2008; Houchin et al., 2012). While there exists a substantial body of empirical peer-reviewed literature that supports the existence and impact of PA (Harman et al., 2022), persistent dissenting voices argue that this body of research is methodologically flawed (Meier, 2009) and that PA itself is a questionable concept or just a "belief system" held by extremist scholars (Mercer, 2022; Mercer & Drew, 2022). This thesis delves into the heart of this controversy by scrutinizing the methodological quality of the existing empirical literature on PA. By undertaking a comprehensive assessment of the research methods and approaches employed

in these studies, this research aims to shed light on the validity and reliability of the evidence surrounding PA. In doing so, this work contributes to the ongoing discourse surrounding this complex and emotionally charged issue, providing a more consolidated understanding of the research that has sought to explore it.

### **What is Parental Alienation?**

Parental alienation refers to the outcome of coercively controlling abuse, whereby a parental figure, who often wields more power in the family system, undermines the child's relationship with the other, or targeted parent (Bernet et al., 2022; Harman et al., 2020; 2022). This manipulative campaign against the targeted parent may result in the child developing an irrational and unjustified fear of the targeted parent, rejecting them when a previously healthy and loving relationship existed. The manipulative behaviors and tactics employed by the alienating parent are called parental alienating behaviors (PABs), and they are used with the intention of eroding the child's trust, love, and emotional connection to the targeted parent who traditionally does not reciprocate said behaviors (Baker & Darnell, 2006; Harman et al, 2019). These PABs often involve parental denigration, false accusations of abuse, custodial interference, and the creation of emotional alliances that exclude the targeted parent (Bernet & Baker, 2013). Parental alienation typically emerges in the context of high-conflict divorces or separations, fueled by animosity and acrimony between the parents, but may also exist within intact families (Hands & Warshak, 2011). It is important to recognize that PA does not occur when rejection of the targeted parent is justified, such as in cases of abuse. It is likewise important to recognize that PA behaviors are not always successful, resulting in a child not being alienated by the targeted parent but instead backfiring in some scenarios such as when only

parental denigration occurs, harming the relationship with the alienating parent (Rowen & Emery, 2018).

### **What Parental Alienation is Not?**

While PA may share some characteristics with other family dynamic concepts, it is not synonymous with estrangement or loyalty conflicts. The similarities and differences between these forms of family conflicts are described below.

#### *Estrangement*

Estrangement refers to the distancing or separation of a child from a parent due to a variety of factors, which may include but are not limited to: developmental changes where estrangement can occur naturally as children grow and seek greater independence, often leading to temporary distance from their parents; life circumstances resulting from life events such as relocation, remarriage, or new family dynamics, causing a temporary disconnect; individual preferences where sometimes children choose to distance themselves from a parent due to personality clashes or differences in values, interests, or lifestyle; or neglect in cases where a parent has been neglectful, abusive, or unavailable, and estrangement may be a protective response by the child (Drozd & Olesen, 2004). Furthermore, children may choose to distance themselves from a parent as a result of poor parenting, and real or perceived physical and/or emotional abuse (Agillias, 2016; Rittenour et al., 2018).

While PA and estrangement are distinct concepts, it is possible for both to exist at the same time, creating what are known as hybrid cases (Marques et al., 2022; Walters & Friedlander, 2016). For example, a parent may have struggled in the past with addiction that resulted in some abusive behaviors towards a child, but after being sober for 10 years and no longer posing a risk, the other parent still portrays them as dangerous to the child. Alternatively,

a parent may be rejected by a child due to PABs that are seemingly justified by the targeted parent's behaviors. Though minor or benign, these infractions are exaggerated in the eyes of the child through PABs.

There are a couple key distinctions regarding estrangement and PA; the most critical distinction lies in intentionality (Isailă & Hostiu, 2022). Parental alienation involves a deliberate and systematic effort by one parent to harm the child's relationship with the other parent (Bernet et al. 2020). In contrast, estrangement typically arises from natural or circumstantial factors without a deliberate campaign to alienate. Estrangement is often reversible when the underlying causes are addressed, and both parties are willing to reconcile (Isailă & Hostiu, 2022). Parental alienation, however, requires more complex interventions, as the alienating parent's motivations and behaviors must be addressed (Warshak, 2019). Estrangement can be temporary and may change over time (Scharp, 2023), whereas PA tends to persist and intensify if left unaddressed.

### *Loyalty Conflicts*

Loyalty conflicts and PA are also distinct phenomena often observed within high conflict families. While both concepts involve complex interactions within family systems, it is essential to recognize their differences and isolated independence from each other to understand their implications fully.

Unlike PA, loyalty conflicts arise when a child becomes triangulated within the family system and feels pulled, or "in between" their parents. This concept involves the shifting of conflicts or tensions within a family from a two-person relationship to a three-person dynamic (Minuchin, 2018), and it typically occurs when a family member (usually a child) is recruited or drawn into the parental conflict to serve as a buffer, messenger, or mediator between the parents forcing a child to be caught in the middle (Amato & Afifi, 2006; Grych et al., 2004). This

phenomenon can be unintentional and may result from a child's attempt to ease parental conflict or seek protection from it.

Parental alienation is characterized by a deliberate intent to harm the child's relationship with the targeted parent. In contrast, loyalty conflicts often occur unintentionally, with the child caught in the middle of parental conflicts without the explicit aim of alienating them from either parent (Buehler & Welsh, 2009; Harman et al., 2019). Parental alienation also primarily affects the parent-child relationship, with one parent engaging in unreciprocated alienating behaviors (Harman et al., 2019). Loyalty conflicts involve conflicts or tensions primarily between the parents, with the child serving as a mediator or buffer (Buehler & Welsh, 2009). Loyalty conflicts can potentially be resolved by addressing the underlying parental conflicts and improving communication between the parents. (Buehler & Welsh, 2009), however PA requires specialized interventions to address the alienating parent's behaviors and motivations, which may not necessarily resolve the underlying parental conflicts (Warshak, 2019). Loyalty conflicts can be situational and temporary, dependent on the fluctuating dynamics of parental conflicts, while PA tends to persist and intensify if not addressed.

Additionally, unlike estrangement, families would not experience both loyalty conflicts and PA simultaneously (Bernet et al., 2016). While loyalty conflicts and PA may exist within intact and separated families, loyalty conflicts result in the child or children trying to maintain a relationship with both parents despite being caught in the middle or even when one or both parents are violent or abusive. On the other hand, PA occurs when the child aligns with one parent at the expense of the other, despite the alienated parent being safe or previously having a healthy relationship with the child.

Recognizing these distinctions is essential for professionals working with families experiencing high-conflict situations. Logically, mislabeling loyalty conflicts as PA or vice versa can lead to inappropriate interventions and further confusion within the family system. While both phenomena have the potential to harm children and disrupt healthy family dynamics (Bernet et al., 2016), understanding their unique characteristics allows for more effective and targeted strategies to address the specific challenges they present. Additionally, understanding that PA and estrangement can co-occur (Marques et al., 2022; Walters & Friedlander, 2016) is important for both court rulings and treatment by mental health professionals. Recognizing PA as a unique and harmful phenomenon allows for more targeted and effective strategies by court and therapy professionals to address the underlying dynamics and promote healthier parent-child relationships, ultimately benefiting the well-being of children and families involved in high-conflict divorce or separation scenarios (Friedman et al., 2014; Warshak, 2019).

### **The Impact of Parental Alienation**

Parental alienation is a distressing and complex family dynamic that can have profound and far-reaching consequences on children, parents, and extended family members. These consequences are not limited to occurrences during PA, but also have long-lasting effects, echoing for years throughout the lives of all those involved.

#### *Impact on Children*

One of the most devastating aspects of PA is the emotional turmoil it inflicts upon children. It is estimated that 1.3% of parents in the US (3,858,309) are moderately to severely alienated from a child (Harman & Leder-Elder et al., 2019). As many parents have more than one child, it is estimated that well over 1% of children are moderately to severely alienated. Alienated children often experience a range of emotions, including anger, confusion, guilt, and

sadness. They are torn between their loyalty to one parent and their longing for a relationship with the other. These conflicting emotions can lead to anxiety, depression, and a sense of isolation. Additionally, PA can have long-term psychological consequences for children. They are at risk for an increase in negative emotional regulation, particularly with an increased likelihood to develop oppositional defiant disorder (Chen et al., 2020). As they internalize negative beliefs and attitudes about the alienated parent, their self-esteem and self-worth may suffer (Baker, & Ben-Ami, 2011; Bentley & Matthewson, 2020). Alienated children may also struggle with forming healthy relationships in the future, as they may carry unresolved issues and trust issues from their experiences of alienation (Aloia & Strutzenberg, 2019; Krill-Reiter, 2019) and are significantly more likely to experiencing a significant increase in depressive and anxious symptomology with an increase in reporting the development of negative physical outcomes (Baker & Verrocchio, 2016; Verrocchio et al., 2019). Additionally, they may find it difficult to maintain a job, form careers, and remain financially stable (Bentley & Matthewson, 2020).

Harman and colleagues (Harman & Matthewson et al., 2022) discuss a cascading effect of profound losses from children who are alienated from their parent, starting with a corruption of their reality. As alienation continues this starting point of corrupted reality expands or “cascades” into a myriad of losses. There is the loss of individual self where the alienated parent is depicted as unsafe and unavailable, causing the child to distance themselves from that parent eroding the child's sense of self as the alienating parent utilizes emotional manipulation to foster an unhealthy bond with the child, leading to the child's inability to express personal autonomy and develop an independent identity. Afterwards is the loss of childhood and innocence whereby children experience a loss of innocence due to excessive focus on the alienating parent's needs, adultification, and inappropriate information sharing. As noted by Harman and Matthewson this

often results in missed opportunities for age-appropriate activities, affecting their psychosocial development and loss of innocence concerning their relationship with the alienating parent. Next is a loss of a good enough parent, whereby the child rejects the parent on the false pretense that a healthy relationship never existed when in fact it did, relying on falsified harbored negative feelings seeing formally “good enough” parent as all bad. Conjunctively this is followed by a loss of extended family and the impacts of such as discussed below. Last is the loss of community where the child loses a major support system, is moved into unfamiliar environments, and as such is left to themselves to deal with the fallout.

### *Impact on the Parent*

The effects of PA are not limited to the children involved. The alienated parent often experiences profound grief and loss as they are unjustly distanced from their child (Harman et al., 2019). Parents who have lost custody of a child through PA also experience more intense feelings of loss, similar to ambiguous loss which is different from the death of a child (Boss, 2006, as cited in Warshak, 2010). They may struggle with feelings of powerlessness and frustration as they are unable to protect their child from PABs. This emotional burden can lead to depression, anxiety, and a sense of hopelessness, or a negative impact on their health including weight-loss or gain (Lee-Maturana et al., 2020a). In addition, as found by Harman et al. (2019) 47.2% of moderately to severely alienated parents contemplated suicide, with those rates increasing as the severity of being alienated increased. This finding is further compounded by an increase in depression and anxiety experienced by these same parents (Harman et al., 2018). Many of these parents, despite seeking therapy from the mental health profession, expressed concerns that their therapists were unaware of PA and thus unable to grasp the legitimacy of PA and have the adequate knowledge and resources to help them (Torun & Matthewson, 2021).

Furthermore, Hine and Bates (2023a; 2023b) found that fathers experienced an increased negative impact to their finances, grief for the loss of the formerly healthy relationship they had with their child or children, self-esteem and damage to their identities including that of a good parent, and constant concern for their children's wellbeing including the loss of their children's childhood. In addition, these fathers faced abuse similar to intimate partner violence, including being lied to about their children, having their children manipulated into abusing the targeted parent, or being restricted from interacting with their children who are weaponized against them. These forms of coercive control over both the targeted parent and the child often begin occurring before the targeted parent leaves the home (Lee-Maturana et al., 2020b).

### *Impact on the Family*

Parental alienation can extend beyond the immediate family. Extended family members, such as grandparents, aunts, uncles, and cousins, may also be impacted as they witness alienation and are often prevented from maintaining relationships with the alienated child (Bonds & Matthewson, 2022). Loss of relationships with extended family members also results in a loss of social capital, whereby the child loses access to support and life enriching resources that otherwise would have been made available to them (Harman & Matthewson et al., 2022). Additionally, grandparents experience their own unique sets of complications including fear that they won't live long enough to see a reunified relationship with their alienated grandchildren, feelings of hurt on not being recognized as an impacted party, negative impact to their identity as a grandparent, in addition to despair and other negative feelings and emotions (Avieli & Levy, 2022). This alienation can result in strained family dynamics and a sense of helplessness among extended family members. The effects of PA can lead to social isolation for both the alienated child and parent. Alienated children may find it challenging to form friendships and maintain

healthy social relationships due to their internalized negative beliefs. Similarly, the alienated parent may withdraw from social activities and support networks due to the emotional toll of the alienation process (Harman, Matthewson, et al., 2022).

Parental alienation can escalate into protracted legal battles (Colorado Legal Group, 2022), further exacerbating the emotional and financial stress on families. Legal fees, custody evaluations, and court proceedings can be financially draining (Blotky & Bernet, 2022; Giancarlo & Rottman, 2015). Additionally, legal disputes can intensify animosity between parents, making co-parenting even more challenging (Warshak, 2015). In severe cases of PA, the relationship between the alienated child and the targeted parent may become irreparably damaged. Rebuilding trust and a healthy parent-child bond can be an arduous process, with no guarantee of success.

Parental alienation's impact is pervasive and enduring, affecting children, alienated parents, extended family members, and even the broader social and legal context. Recognizing the emotional and psychological toll it exacts is essential in advocating for early intervention, support, and education to mitigate the devastating consequences of PA. In the subsequent sections, we will explore strategies for addressing and preventing PA to protect the well-being of children and families.

### **Critiques of the Quality and Robustness of PA “*Junk*” Science**

Parental alienation has become a contentious and emotionally charged topic among some scholars and advocates, with some critics arguing that there are significant limitations in the scientific research surrounding this phenomenon. While PA has gained recognition and attention, particularly in legal and custody contexts, there are persistent critiques regarding the quality and robustness of the scientific evidence and questions regarding its legitimacy as a scientific

phenomenon, referring to it as a “*junk*” science (Thomas & Richardson, 2015) despite research being regularly published in high quality scientific journals (see Harman, Warshak, et al., 2022). Yet, it is important to note that though a study is published in a peer reviewed source, this does not necessarily provide conclusive evidence of scientific robustness which will be addressed later. I will hereafter review various critiques of PA, and then address them wholly.

### *Lack of Empirical Consensus*

One of the most prominent critiques of PA research by some scholars and advocates is the claim that the field lacks empirical consensus. Critics argue that there is no universally accepted or standardized definition of PA, which has led to considerable variability in research methodologies, criteria for identification, and measurement tools (Meier, 2009). This alleged lack of consensus is presumed to have made it challenging to compare findings across studies and establish a coherent body of research. Some critics argue that the very concept of PA is contentious and not well-defined within the scientific community (Milchman et al., 2020), and that it is often used to describe a wide range of behaviors and situations, making it challenging to establish clear criteria for diagnosis and measurement. This ambiguity, they argue, hinders the development of a cohesive and scientifically sound understanding of parental alienation.

Counter to this above argument, Saini and colleagues, despite voicing several concerns, found that there is a general consensus on how PABs are defined amongst professionals (Saini et al, 2016). In addition, Bernet et al. (2022) performed a survey of 119 child custody evaluators, whereby about 80% declared a general consensus on 11 key defining definitions of PA. This is further expounded by Harman and colleagues (2022) review, finding that there is a general consensus in the scientific literature regarding how PA is defined, portrayed, and recognized.

### *Lack of Robust Scientific Evidence: Poor Methodology*

Another primary criticism is that there is a perceived absence of comprehensive and methodologically rigorous research on PA (Meier, 2009; Milchman et al., 2020). Critics argue that the existing body of literature often relies on anecdotal evidence, case studies, or small sample sizes, making it difficult to draw broad and reliable conclusions about the prevalence and causes of parental alienation (Saini et al, 2016). Additionally, critics point out that many studies on PA suffer from methodological flaws (Milchman et al., 2020). These critics argue that these studies often lack control groups, utilize non-standardized measures, or are conducted by researchers with potential biases, which can compromise the validity and generalizability of their findings. On the other hand, over time PA studies have diversified their methodology, study samples, and assessment techniques, suggesting a more comprehensive and unbiased approach addressing many of these concerns (Harman & Matthewson et al., 2022).

### *Other Critiques*

Another point of contention raised by critics is the connection between PA and legal disputes, particularly within the context of custody battles. Critics suggest that PA may be overemphasized in legal settings, potentially leading to misdiagnoses or mischaracterizations of complex family dynamics (Mercer, 2022). Some critics express concerns about the potential psychological and ethical consequences of labeling an individual as an alienator or a target (Concerned Family Law Academics et al., 2019). They argue that the use of such labels can have long-lasting and negative effects on family relationships and may not be in the best interests of the children involved.

In contrast to the claims, it was found that allegations of PA did not lead to an increase in misdiagnosing or mischaracterization. Instead, courts are found to weigh PA matters carefully

and deeply, leading to a higher consistency in correctly identifying PA in legal settings, not accepting false claims at face value (Harman & Lorandos, 2021). It was further found that mischaracterization, or unsubstantiated claims, are more likely to be levied against an alienated parent with an 86% greater probability compared to the alienating parent who had an 81% greater probability of having a correctly substantiated abuse claim levied against said alienator (Sharples et al., 2023).

### *Pseudoscience*

The above-mentioned critiques of PA are also used by critics to claim that PA is a pseudoscience. For example, Dalgarno (2023) claims that PA is unscientific, referencing a 2003 UK Independent article (Gumbel, 2003) stating the “authentic American monster” Richard Gardner has been discredited, therefore the phenomenon of PA is debunked pseudoscience. Yet, claiming a scientist is discredited does not necessarily constitute pseudoscience in a field. Holland (2022) has expressed concerns and fears that PA allegations may be weaponized to falsely accuse mothers of PA where none exist in a debate about whether or not PA is pseudoscience. Holland further recommends that court experts undergo proper training involved and follow evaluator guidelines. However, these critics raise concerns regarding the pseudoscience of PA, yet do not provide a clear definition on what pseudoscience is. Furthermore, though false accusations exist, logic dictates that this would not illegitimatize the existence of PA in cases where it is real.

According to Bond (2008), the difference regarding science and pseudoscience of PA and Parental Alienation Syndrome (PAS) is that with science the studies are published in peer-reviewed journals, the work is falsifiable, and “persuades by evidence, and over time, more and more is learned about the theory under study (p. 44).” The author further states that PA is

pseudoscience when there is no peer review, it is not published in scientific journals, there is no accuracy demands of the research, and the research lacks reliable standards. Therefore, Bond argues that PA or PAS is pseudoscience lacking rigorous science, despite this article having been published during the earlier stages of PA literature when much of PA was still being explored. As such, PA continues to be plagued by claims of pseudoscience in media and blog outlets as of writing this study (e.g. see Leonetti, 2023).

The issue with identifying pseudoscience from science lies within intricate debate between what defines the two and is not always easy to delineate (Schmaltz & Lilienfeld, 2014). Proponents of pseudoscientific methods may claim legitimacy based on selective references and endorsements by notable organizations (Jupe & Denault, 2019). Additionally, pseudoscience exists without empirical or theoretical backing, lacking methodological rigor. Yet, pseudoscience tends to remain difficult to differentiate from real science. This is an issue known as the philosophical demarcation problem noted by Karl Popper, whereby the idea that for a theory to be scientific, it must be testable and refutable (Gordon, 2023). Identifying where the line on science ends and pseudoscience begins is sometimes problematic to identify as they both exist on a continuum (Lee & Hunsley, 2015; Schmaltz & Lilienfeld, 2014). While a definitive line distinguishing science from pseudoscience remains elusive, one can utilize critical thinking when identifying pseudoscience by highlighting certain red flags that typically suggest pseudoscientific claims. These indicators are not absolute but serve as practical guides to discern more scientific approaches from less credible ones and I have synthesized these as the following:

- Extraordinary claims without evidence
- Unfalsifiable
- Lack of connectivity to other research

- No or lack of peer review
- Lack of self-correction when refuted
- Overuse of ad hoc hypotheses for negative findings
- Overuse of anecdotal evidence

The increased use of the above increases the likelihood that a phenomenon is pseudoscience rather than legitimate science (Lee & Hunsley, 2015; Schmaltz & Lilienfeld, 2014).

In summary, critics of PA argue that the lack of robust scientific evidence, methodological issues in research, the controversial nature of the concept, its association with legal disputes, and potential psychological and ethical concerns collectively cast doubt on its legitimacy as a well-established scientific phenomenon. These concerns underscore the need for further research and critical examination of the concept of PA within the academic and professional communities.

### **Addressing Concerns of Scientific Quality**

In 2016, Saini and colleagues attempted to evaluate the quality of PA research by utilizing the assessment tool GRADE (Grading of Recommendation, Assessment, Development, and Evaluation; GRADE, 2023; Guyatt et al., 2008). Through the implementation of this method, by evaluating 58 studies, Saini et al. (2016) determined that PA research overall exhibited poor empirically validated scientific evidence, though they recognized that there tended to be an agreement on behaviors parents use to manipulate children resulting in a definable cluster of symptoms.

Harman and colleagues (2022) have argued that a weakness of the Saini et al. (2016) review is a failure to fully consider the breadth of qualitative research conducted on PA. Qualitative research methods, such as interviews, observations, and content analysis, enable

researchers to uncover hidden meanings, cultural nuances, and divergent perspectives that quantitative methods may overlook, yet this form of research plays an important role both with current studies and with the early development of psychological studies (Sabnis et al., 2023). The subjective nature of qualitative research does not detract from its credibility but instead has progressed into a methodology of strong scientific rigor (Morse et al., 2002; Smith, 2015 as cited in Burney et al, 2023). Qualitative methods provide the context behind the complexities of behavior, social interactions, and other complex human dynamics (Burney et al, 2023). Furthermore, they allow for a more focused application of science for the targeted or intended population.

In addition to Saini, Marques and colleagues (2020) conducted a review, identifying 43 studies on PA up to 2018, but excluded foreign language publications, judicial record samples, smaller participant groups, non-parent caregivers, intervention effects studies, and case studies without reason, though their criteria leaned towards quantitative studies (Harman et al, 2022), which limits their view of the PA literature. Such exclusions can potentially hinder drawing accurate conclusions about the overall scientific understanding of PA. Furthermore, Margues et al. used PRISMA in their assessment, despite not providing clear details on how this assessment was used in appraising quality, or the basic details of how the coding occurred. While being an excellent tool for reporting interventions, the PRISMA guidelines acknowledge that it is not a quality assessment guide (PRISMA, 2023). This is due to PRISMA primarily functioning as a reporting tool and guide designed to enhance clarity, transparency and consistency when choosing what to include or exclude in a systematic review or meta-analysis (see Figure 2 for an example of a PRISMA flowchart used in this very study). Though providing clarity and trust

regarding included studies in a review or analysis, as mentioned before, by PRISMA (2023), PRISMA lacks qualitative assessment depth.

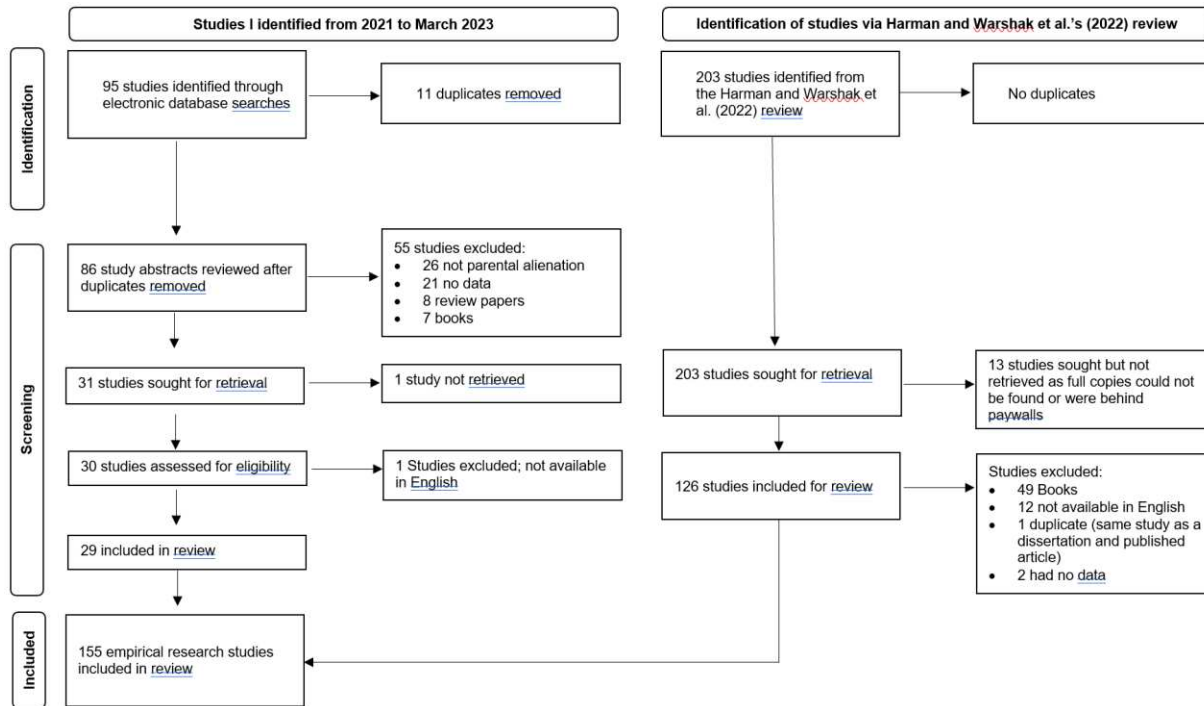


Figure 2

### Selection and Screening Procedures

Note: Table flow chart template from Page MJ, McKenzie JE, Bossuyt PM, Boutron I, Hoffmann TC, Mulrow CD, et al. The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. *BMJ* 2021;372:n71. doi: 10.1136/bmj.n71. For more information, visit: <http://www.prisma-statement.org/>

### Harman Review

Harman and colleagues (2022) addressed several concerns of both PA critiques and previous PA reviews. It was found that a significant portion of empirical PA literature has been published after 2016, accounting for 40% of said studies. In conjunction with the increased rate of publications is a shift in qualitative to quantitative research studies and hypothesis testing publications. Furthermore, there was an array of various methodologies used to research and assess PA, suggesting a diversified and developed field of PA study. This alone suggests that

Saini's (2016) review is outdated in assessing the quality of PA research and should no longer be used describing the current state of PA literature.

The Harman et al. (2022) review further illustrates how PA research contributes to current understanding in the field and identified 16 general areas of contributions. These identified contributing areas are: PABs, use of false allegations of abuse, manifestations of PA in children, direct relationships between PABs and PA, other outcomes associated with PA for children and also for alienated parents, direct relationship between PABs and other outcomes for alienated parents and children, justice system involvement, professional knowledge and attitudes, direct relationship of third parties and institutions on alienated parent and child outcomes, interventions, gender of alienating parent, personality and behaviors of alienating parents, prevalence and scope of the PA problem, and demographics of alienated children.

The aim of the Harman et al. (2022) review was to evaluate the progress of research on PA to determine if it's in an advanced "blossoming" phase or still in its early stages of development as suggested by Marques et al. (2020) and Saini et al. (2016). The Saini et al. review, being from 2016, missed out on this growth, and Marques et al. (2020) focused only on publications before 2018. The Harman et al. review is distinguished by its comprehensive approach and its inclusion of studies not only in the English language. The authors accessed four databases, identifying 213 documents on PA, significantly more than prior reviews by Saini et al.'s 39 studies and Marques et al.'s 48 studies. In addition, their search, like this current study's search, was specific using search terms directly related to PA to ensure relevance.

To summarize, initial research on PA was mainly qualitative and descriptive. However, after 2016, there's been a transition towards quantitative studies. This shift, combined with an increase in theoretical application and hypothesis testing, suggests that PA research is now in a more

mature stage of development as a field of study. The review highlighted the diversity in research tools, participants, and assessment methods used in PA studies. This broad approach demonstrates a multifaceted perspective on PA, avoiding common method biases and strengthening the overall validity of findings. In summary, the Harman et al.'s review suggests a strong likelihood that PA research is methodologically sound, offering valuable insights into the impact of parental conflict on children and families.

### **GRADE as an Assessment Tool of Research Quality**

The use of GRADE is typically employed to assess the quality of evidence in the context of healthcare interventions and clinical guidelines (GRADE, 2023). While GRADE is a valuable tool in the field of medicine and healthcare, it is not suitable for evaluating the quality of science regarding PA for several reasons. GRADE was specifically developed to evaluate evidence related to clinical interventions such as drugs, medical treatments, and healthcare practices (Guyatt et al., 2016). Parental alienation, on the other hand, is a complex sociopsychological phenomenon involving family dynamics and legal matters. It doesn't fit neatly into the framework designed for evaluating clinical interventions (Harman et al., 2022). However, the scientific literature on PA is still relatively limited compared to established medical fields as it yet does not focus heavily on clinical trials. Instead, many studies on PA involve observational research, case studies, or surveys rather than clinical trials or experiments (Harman et al., 2022), which are the primary focus of GRADE. Consequently, applying GRADE criteria to such studies may not yield meaningful results.

Studies on PA have significant heterogeneity in terms of methodologies, definitions, and sample populations. GRADE's emphasis on consistency and uniformity in evidence may not be well-suited to assess this diversity (Sadelowski, 2012), as it is primarily designed for clinical

trials that adhere to strict protocols (Higgins et al., 2023). Unlike clinical guidelines, there are no widely accepted, standardized guidelines for assessing PA as PA research spans multiple disciplines, including psychology, sociology, law, and family studies. Therefore, GRADE may not effectively capture the interdisciplinary nature of this research, as it tends to be applied within the confines of a single clinical domain.

In summary, while GRADE is a valuable tool for evaluating evidence in the context of clinical interventions and medical guidelines, it is not well-suited for assessing the quality of science regarding PA due to the complex, heterogeneous, and interdisciplinary nature of the field. Alternative approaches or frameworks that account for these unique characteristics and controversies within the field of parental alienation research would be more appropriate.

#### **Alternative Appraisal: The Mixed Methods Appraisal Tool (MMAT)**

The Mixed Methods Appraisal Tool (MMAT; Hong et al. 2018) is a systematic tool and guideline developed for appraising the quality of research studies that employ mixed methods research designs. Mixed methods research combines both quantitative and qualitative research approaches within a single study to gain a more comprehensive understanding of a research question or problem. The MMAT was designed to assist researchers, reviewers, and policymakers in evaluating the methodological quality of mixed methods studies across various disciplines, including healthcare, social sciences, education, and more. The following is a description of the key features and components of the MMAT.

##### *A Comprehensive Framework*

The MMAT provides a systematic and structured approach for assessing the methodological quality of mixed methods studies. It covers five broad categories of research, each with its own set of criteria, to evaluate different types of mixed methods designs and

research questions. This approach appraises the quality of the qualitative and the quantitative components of the study, as well as overall quality of mixed methods studies, including integration and synthesis. This approach also evaluates studies that use mixed methods approaches within randomized controlled trials and non-randomized mixed methods studies, such as quasi-experimental designs or observational studies.

#### *Detailed Criteria and Guidelines*

Within each category, the MMAT provides specific criteria and guidelines for assessing the quality of the research. For example, in the qualitative research category, criteria may include the appropriateness of data collection methods, the rigor of data analysis, and the clarity of reporting. In the quantitative research category, criteria may focus on sampling techniques, data analysis, and statistical reporting.

#### *Grading System*

The MMAT employs a simple grading system for each criterion, allowing reviewers to assign a score indicating the quality of the research. The grading typically ranges from "Yes" (indicating that the criterion has been met), "No" (indicating that the criterion has not been met), or "Can't Tell" (indicating insufficient information in the study to make a judgment). Reviewers can then tally the scores to provide an overall assessment of the research study's quality. Additionally, the MMAT is designed to be flexible and adaptable to different research contexts and disciplines. Researchers and reviewers can use it to evaluate mixed methods studies regardless of the specific research question, topic, or field.

Using the MMAT encourages transparent and standardized reporting of the strengths and weaknesses of mixed methods research studies. This approach can help readers, including policymakers and practitioners, better understand the limitations and strengths of the research

they are reviewing. Overall, the MMAT serves as a valuable resource for systematically assessing the quality of mixed methods research studies. By providing a structured framework and clear criteria for evaluation, it helps ensure that mixed methods research is conducted and reported with rigor, contributing to the credibility and usefulness of research findings across various disciplines and research contexts.

### **Purpose of the Current Study**

The purpose of this study is to critically evaluate the quality of empirical peer-reviewed research on PA, addressing concerns raised by critics who assert that the field suffers from methodological flaws and inadequate sample sizes, thereby limiting the robustness of its findings. Given the claims surrounding the methodological soundness of existing research, this study seeks to investigate the accuracy of these assertions. To achieve this goal, an effective tool for assessing research quality will be employed, specifically one that does not replicate the issues identified in previous assessments such as Saini et al.'s (2016) assessment. The Mixed Methods Appraisal Tool (MMAT; Hong, 2018), known for its versatility in assessing qualitative, quantitative, and mixed-methods studies, was utilized. It is particularly suitable for evaluating studies beyond the clinical medical trial context. For this study, I hypothesized that the body of research on PA is of high scientific rigor. Furthermore, it was hypothesized that the quality of research on PA has improved over time, in tandem with the increasing attention and “blossoming” of research on this complex phenomenon. This study aims to shed light on the methodological strengths and weaknesses of the existing body of research, contributing to a more comprehensive understanding of PA and its empirical foundations. Additionally, as raised by the critique of PA being pseudoscientific, this study also explored the evaluated literature to utilize

recommended indicators to help further identify if PA literature leans more towards scientific or pseudoscientific in nature.

## METHODS

This study builds upon the Harman et al. (2022) systematic review, whereby they compiled a database systematically reviewing the scientific status of PA as we currently know it in the field. Their review did not empirically appraise the quality of each piece of research, which is the purpose of the current study. Harman et al.'s open-source database identifies 213 documents containing empirical data spanning from the infancy of PA to January 2021, in which their “final sample included 203 articles, books, theses, and dissertations” (page 1891). As this study builds on Harman et al.'s (2022) systematic review of PA, the same protocol for identifying and collecting studies was followed to ensure consistency, as newly identified empirical studies were added to the empirical studies Harman and colleagues already identified. However, as this study's focus is on peer reviewed studies published in journals and dissertations, any studies from Harman and colleague's database that did not meet these criteria were excluded (see below).

### **Sample of Studies**

To begin identifying and collecting empirical PA studies, Harman et al's (2022) open access database was accessed from Open Science Framework ([https://osf.io/h9r38/?view\\_only=24fa3c312051470ca2ebe36e7b1cf676](https://osf.io/h9r38/?view_only=24fa3c312051470ca2ebe36e7b1cf676)) wherein they had identified  $N = 203$  empirical studies published up to January 1, 2021 by searching the following four databases: PsycINFO, Medline, Westlaw, and the Eskind Biomedical Library of Vanderbilt University and the Parental Alienation Study group. The two search terms they used were “parental alienation” or “parental alienation syndrome”.

For this study, I expanded the search utilizing the above search protocol (See figure 2). Each peer reviewed article found was reviewed using the article's abstract. The abstract was accessed to determine if the study included data and was an actual study of PA. If these criteria remained unclear the full study was pulled for a more thorough read to further determine if it contained empirical data and was in actuality a study on PA. Foreign language articles were requested in an English format or were otherwise excluded. Any articles that did not include data such as a review or opinion, or were mislabeled as PA were also excluded (e.g., had one line mentioning PA, but had no further discourse specifically on the topic). In addition to Harman et al.'s systematic review, an additional 31 peer reviewed studies, published since January 1, 2021 through March 2023 were added for a final sample total of  $N = 155$  studies to be coded (see below).

The Harman et al. (2022) systematic review not only included peer review published articles, but also included published books and book chapters, in addition to theses or dissertations. As this study's goal was only to look at published peer review studies, the books and book chapters Harman et al. found were excluded (49 studies), reducing the sample of peer-reviewed studies to 154, yet dissertations were included as they are viewed to undergo a different yet rigorous panel review process and are often a cited resource in various peer reviewed studies, not just on PA. Due to the need to record considerable methodological details about the research studies for this assessment, only studies available in English were included because the coders were not multilingual. English versions of articles published in other languages were requested from the authors, however a total of 12 were removed due to not being available in English, or able to be translated into English. One study was published twice, once as a dissertation and once as a peer-reviewed study, and subsequently the dissertation version

was removed from coding. Upon further review, two articles did not analyze any data and an additional 13 were not included because their full articles could not be found, either from non-response requests from authors, paywalls, or due to unknown author and title, rendering finding such studies for inclusion difficult (e.g. “Hulsing, 2020”; “Ferguson, 1992”, as found in Harman, Warshak et al. 2022 *Parental Alienation Publications Database.xlsx* open data). The final analyzed sample from Harman et al’s review is  $N = 125$ , which was then combined with the expanded search studies as described above for a total  $N = 155$ . This final sample consists of 136 journal articles (87.18%), and 20 dissertations (12.82%). Out of these studies 65 (41.67%) used qualitative research methods, 71 (45.51%) were quantitative, and 20 (12.82%) used mixed methods with both quantitative and qualitative methodologies (see Table 1).

## **Material and Coding**

### *Mixed Methods Appraisal Tool (MMAT)*

The Mixed Methods Appraisal Tool (MMAT) 2018 version (Hong et al., 2018) was used to assess the quality of PA research. The MMAT was developed by an international team after assessing literature reviews gauging the efficacy of critical appraisal tools in 2009, adjusted to the 2011 version, and later refined into the 2018 version (Pluye et al., 2009; Pluye & Hong, 2014, Pace et al., 2012; Hong, 2018). Both forms utilized the expertise of subject matter experts for the development and refinement of the form. The checklist is an excellent tool for assessing the quality of empirical quantitative, qualitative, and mixed-method studies (Abbott, 1998; Porta et al., 2014).

Coding of the MMAT is performed by assessing five categories of a study’s design by responding “yes”, “no”, “can’t tell” to each question contained within each category (see Figure 1). The categories (qualitative, quantitative, randomized controlled trials, quantitative non-

randomized, quantitative descriptive, and mixed methods) assess a study's ability to adequately answer research questions or hypotheses, data completeness, substantiated interpretation of results, and so on. Each category assesses the quality of a quantitative or a qualitative study by asking five questions per each of these categories. The category regarding mixed methods contains its own unique set of five questions specific for mixed methods, then adds in the questions for the "qualitative" category and one of the three "quantitative" categories in order to truly assess the mixed methods approach for a total of fifteen questions on the "yes", "no", "unsure" scale. Some example questions include: "Is there coherence between qualitative data sources, collection, analysis and interpretation?", "Are the different components of the study effectively integrated to answer the research question?", and "Are there complete outcome data?" which assesses if all available data appeared to be included in the final report.

In addition to the above coding questions, an additional question was added to assess whether or not the authors of the evaluated article correctly operationalized PA. This question was "does the article operationalize PA consistent with the literature" (see Appendix 1). Coders were trained on PA operationalization, using Harman et al.'s 2022 review as a guideline, after asking for their own understanding on what constitutes PA. Coders were then informed that PA refers to a situation in which one parent (the alienating parent) manipulates a child to turn them against the other parent (the targeted parent) without legitimate justification. This manipulation can lead to the child rejecting, fearing, or showing hostility towards the targeted parent, even if they previously had a loving and close relationship.

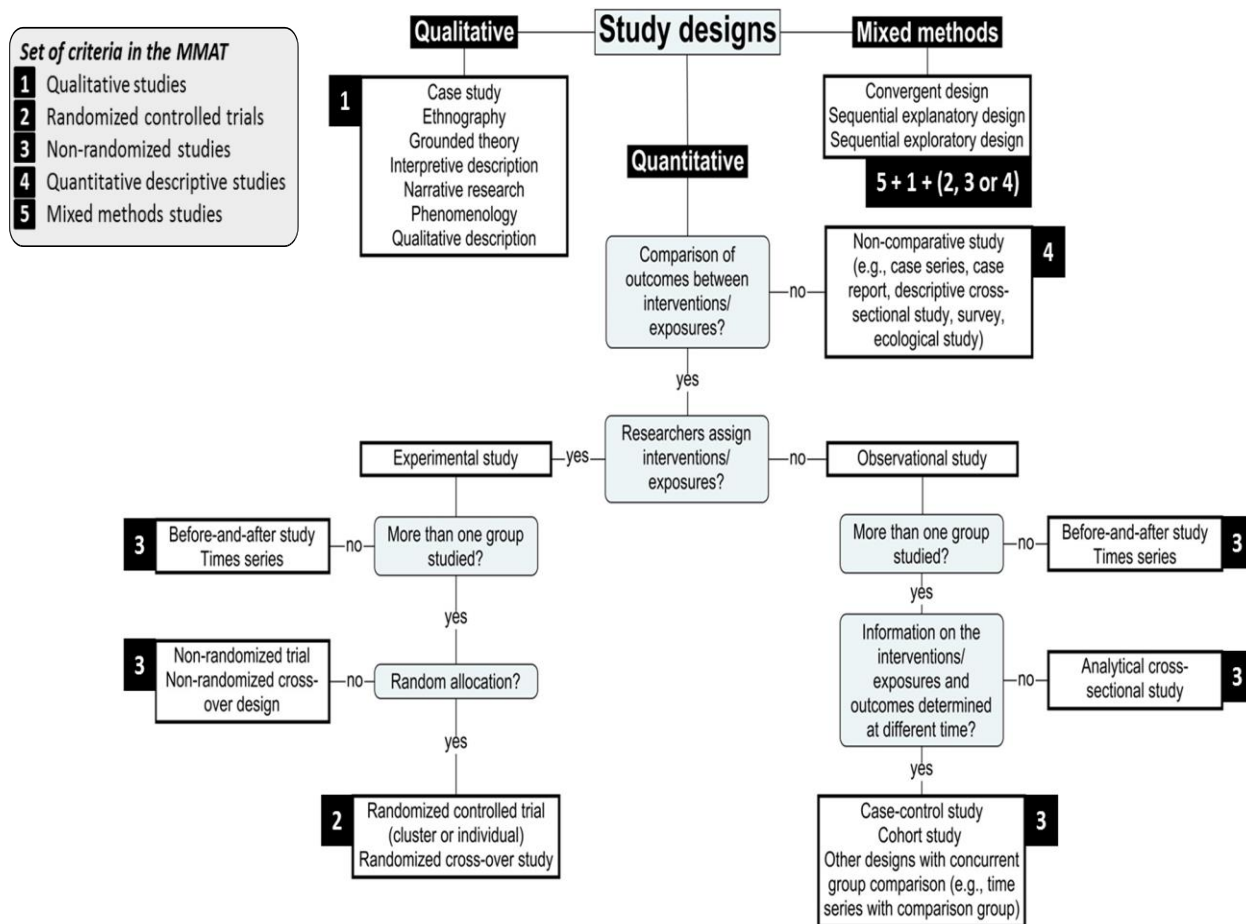


Figure 1

Algorithm for selecting the study categories to rate in the MMAT (2018 version)

Note: Algorithm is from the MMAT (2018 version) user guide

\*Adapted from National Institute for Health Care Excellence. (2012). *Methods for the development of nice public health guidance*. London: National Institute for Health and Care Excellence; and Scottish Intercollegiate Guidelines Network. (2017). *Algorithm for classifying study design for questions of effectiveness*. Retrieved December 1, 2017, from [http://www.sign.ac.uk/assets/study\\_design.pdf](http://www.sign.ac.uk/assets/study_design.pdf).

### Coding

Coding required two independent coders. To ensure rigorous assessment, the MMAT was coded by a team consisting of two undergraduate research assistants and three PhD students (one being the principal investigator of this study). Each coder was trained to assess five categories of study design by responding “yes”, “no”, “can’t tell” to each question contained within each

category. Each coder was randomly assigned a list of articles by random filtering each study into five coding group lists using excel (Tugwell, 2022). Coders were instructed to be as honest in their judgement as possible by being encouraged to “not worry if your score differs from mine or another’s. This is to help reduce bias.” Coders were reminded that they were to be as honest in their assessment regardless of if the study succeeded or failed in supporting PA or their own viewpoints, as final coding results would be made publicly available for further scrutiny (see OSF link above). Additionally, coders were blinded to the coding decision of other coders until each calibration. After coding two articles, the answers were calibrated across coders. This calibration identified any disagreement in rating between coders and the principal investigator. A disagreement ranged from utilizing the wrong category (e.g. category 3) quantitative non-randomized vs category 4) quantitative descriptive) to a single disagreement on a “yes” response vs a “no: or “can’t tell” within a category. Upon detecting a disagreement, coders discussed the differences until an agreed upon consensus was determined through mediation (Medzhitova et al., 2022)

After completing ten more articles, coders were once again assessed on coding consistency and were calibrated for any consistencies (by which there were a total of 6 incongruencies among the coders). Any incongruency between coders were discussed, and the MMAT was consulted until a congruent coded appraisal was reached through this mediation process (Medzhitova et al., 2022; Scheffers et all, 2022). Coders continued coding until their list was completed, or if they were unable to complete their list, the remaining articles were randomly assigned to the remaining coders. After a coder completed their entire assigned list, any disagreements followed the same mediation mentioned above. This resulted in any

additional incongruencies needing to be mediated. Every article was coded by two coders, and every incongruency was discussed until a satisfactory agreed upon score was decided.

### *Scoring*

Final coding was entered into an excel database that has been posted on this study's project page on Open Science Framework (<https://osf.io/vj276/files/osfstorage/65b7f2f59b32ca002297ef59>). Scores were based on the percentage of "Yes" responses in relation to "No/Unsure responses" (Medzhitova et al., 2022; Pluye et al, 2009) and were then transformed into percentages by taking the number of Yes responses and dividing by the total (Scheffers et all, 2022). For example, three "yes" responses with one "unsure" and one "no" response in for a quantitative study would result in a score of 80%. Likewise, twelve "yes" responses with three "no" responses and one "unsure" response would result in a score of 73.3%. Any study that had three or more "yes" responses (Xu et al., 2022; Medzhitova et al., 2022), or scored at 80% or above (Scheffers et all, 2022), were considered strong in quality of scientific rigor with low bias (Medzhitova et al., 2022). For further context, any study rating of 60% or above would be considered moderately strong, whereas 20% or lower would need to be reconsidered regarding scientific merit, but not necessarily guaranteed to be of poor quality (Hong et al., 2018; Medzhitova et al., 2022; Xu et al., 2022).

### *Coding of Pseudoscience*

To assess if PA literature is pseudoscientific in nature, key indicators were identified post hoc. The first three were identified by using Bond's (2008) assessment on PA as pseudoscience. These are 1) was the study lacking peer review (note: only peer reviewed sources were included in this study; either published in a scientific journal or through the graduate peer review process

for dissertations), 2) were the results not published in a scientific journal, 3) did the study lack reliable standards (assessed by the MMAT score over 80% as this tool evaluates scientific rigor). Lee and Hunsley's (2015) and Schmaltz and Lilienfeld's (2014) suggestion that pseudoscience lacks peer review coincides with Bond's number 1. Their suggestion that pseudoscience makes extraordinary claims without evidence was assessed by the MMAT (See Appendix 1) was made into a 4th indicator. The remaining indicators could not be included as there was no way to assess these ad hoc. These were: unfalsifiable, lack of connectivity to other research, lack of self-correction when refuted, overuse of ad hoc hypotheses for negative findings and overuse of anecdotal evidence.

### *Coding*

To assess if a study lacked peer review, it was found that coding for such was unnecessary as only empirical peer review articles were pulled for this study. All articles published in a scientific journal are by nature peer reviewed. Theses and Dissertations were also considered as peer reviewed as they undergo a peer review process for degree requirements. If a study was not published in a scientific journal, it was coded as 0 (e.g., dissertations and theses), and a 1 if it was published in a scientific journal. Lastly, all articles were assessed by their average MMAT score rating, and an average MMAT rating at or above 80% would be considered as being of reliable standards and having the evidence to back the claims made in the article. To assess the 4th indicator, does the PA literature make extraordinary claims without evidence, two questions from the MMAT were identified that address this. These are question 1.5 "Is there coherence between qualitative data sources, collection, analysis and interpretation?" and question 4.5 "Is the statistical analysis appropriate to answer the research question?" All studies that were coded with these questions were assessed to answer this indicator.

## RESULTS

The objective of this study was to first ascertain if the published empirical literature on PA is of strong scientific rigor. To accomplish this, the average MMAT ratings of the PA literature that was coded would need to be above 80%. A significant average above this threshold would indicate good methodological scientific rigor among the PA literature. Second, my next objective was to identify if the methodological quality of PA research has increased over time, as Harman et al. (2022) noted that a significant portion of quantitative studies on PA were published after 2018. By assessing if there is an increase in the quality of studies using the MMAT averages, and then identifying if this quality significantly increases by year of study publication would demonstrate that the quality of research has increased over time. An additional object was to assess if these studies operationalize PA consistent with the literature to identify if there is a general consensus regarding how PA is defined. Last, identifying the likelihood that PA literature is pseudoscientific or not was assessed.

### **Hypothesis 1**

To test my first hypothesis is that the body of research on PA is of high scientific rigor, I examined whether the average of MMAT scores across the studies was equal to or exceeded 80% (Medzhitova et al., 2022; Scheffers et all, 2022). I found that the average MMAT score of all the studies included in this review ( $n = 155$ ) published through March 2023 was  $M = 0.84$  ( $SD = 0.19$ ) or 83.5%, demonstrating an overall strong methodological rigor for the scientific studies and support for the first hypothesis (see Table 1). While the average MMAT score for all studies was  $M = 0.84$ , it would be of value to also explore how these averages vary by the study type, e.g., quantitative, qualitative, and mixed-methods. For qualitative studies the average the average

MMAT score was  $M = 0.76$  or 75.9% ( $SD=.19$ ); for quantitative studies this was  $M = 0.88$  or 87.9% ( $SD=.19$ ); and the average score of mixed methods studies was  $M = 0.92$  or 91.8% ( $SD=.06$ ). The quantitative studies were slightly better in quality than the qualitative studies, whereas mixed methods performed better than both qualitative and quantitative studies, but the differences were small.

Interestingly, the mean MMAT score of qualitative studies fell short of the 80% by just over 4%. Although this score is below the indicated threshold of strong scientific rigor, it does not indicate qualitative studies are of poor quality (Hong et al., 2018; Medzhitova et al., 2022). Instead, being above 60% would be considered moderate in scientific rigor, having enough methodological soundness to answer research questions but may still have some issues with bias, rigor or validity. A mean score of 75.9% is well above 60% and just shy of 80%, meaning that PA qualitative studies are well above moderate and should be considered moderately strong in scientific rigor.

*Table 1*  
*Sample Characteristics of Articles coded using the MMAT (2018 version)*

	Percentage of Sample		<i>M</i>	<i>SD</i>
	<i>n</i>	%		
Article Source				
Journal	136	87.18%	—	—
Dissertation	20	12.82%	—	—
Study Type				
Qualitative	65	41.67%	0.76	0.19
Quantitative	71	45.51%	0.88	0.19
Mixed Methods	20	12.82%	0.92	0.06

*Note.*  $N = 155$ . Total sample  $M = 0.84$ ,  $SD = 0.19$

## **Hypothesis 2**

The second hypothesis that was tested was whether the scientific quality of peer reviewed studies on PA (those published in journals in addition to dissertations) improved over time. A

correlational analysis was calculated, and the correlation coefficient between the publication year and the MMAT score was 0.01,  $p < .05$  (see Table 2). This correlation is very close to zero, indicating an almost negligible linear relationship between these two variables. In practical terms, this finding suggests that changes in time do not have a substantial impact on the MMAT score (see Figure 1). This weak correlation suggests that the scientific quality of studies began strong, and has remained consistently so over time, yet does not indicate that the quality of PA research, as found in journals and dissertations, has increased significantly over the years thus failing to support my second hypothesis.

Table 2  
*Means, Standard Deviations, and Correlations with Confidence Intervals of Year of Publication, Total MMAT Score Averages, and MMAT Scores by Publication Type*

Variable	<i>M</i>	<i>SD</i>	Journal Articles	Theses and Dissertations
Year of Publication	2014.28	6.40		
Average MMAT Score	0.83	0.19		
MMAT Score by Study Type	—	—	.08 [-.08, .23]	.33** [.18, .46]

*Note.* *M* and *SD* are used to represent mean and standard deviation, respectively. Values in square brackets indicate the 95% confidence interval for each correlation. The confidence interval is a plausible range of population correlations that could have caused the sample correlation (Cumming, 2014). \* indicates  $p < .05$ . \*\* indicates  $p < .01$ .

### *Trends*

Although the quality of the PA research studies began high and did not change over time, I also explored trends between the year each PA study was published and the related MMAT

score. To do so, I performed a Mann-Kendall trend test to identify the presence of a monotonic trend regarding MMAT scores by year. The Mann-Kendall trend test does not require the data to be significantly correlated (NLJ, 1949). Instead, it tests for the presence of a monotonic trend to identify consistent increases or decreases over time and is particularly useful when data is not normally distributed. The test yielded a Kendall's tau ( $\tau$ ) of -0.04, suggesting a negligible descending trend of the MMAT score. However, this slight negative correlation does not imply a robust monotonic trend. Furthermore, the two-sided p-value was 0.56, failing the significance threshold of  $\alpha = 0.05$  which coincides with the above correlation calculation. While these findings do not indicate a significant change in quality of PA research over time, the trend may provide useful information for future research.

### **Pseudoscience**

Out of 155 studies, all were peer reviewed, suggesting that by this indicator PA is likely not to be pseudoscientific. However, if we are to only consider articles published in a peer reviewed scientific journals as peer review and not include dissertations, though undergoing a review process of their own, then we can institute an additional step to further assess if this criterion was met. Out of the 155 studies, 136 were journal articles (87.18%) and 20 were dissertations (12.82%). This suggests that the majority of empirical studies on PA are published in scientific peer reviewed journals and are also likely not to be pseudoscientific in nature. Additionally, the overall MMAT average of all studies was 83.5%. This is above the 80% MMAT threshold, suggesting the studies were of strong scientific rigor suggesting the PA studies did not lack reliable standards and are likely also not pseudoscientific.

There were 119 studies that assessed if a claim was made without evidence (MMAT questions 1.5 and 4.5). A total of 8 of these studies were coded as not having enough evidence to

support the claims made by the study. Therefore, 93.3% (n = 111) of studies did have enough evidence to support their claims. This finding also suggests that the empirical studies on PA are likely not to be pseudoscientific according to the 4<sup>th</sup> indicator of pseudoscience identified above.

### **Operationalizing of PA**

The studies were assessed on how PA was defined, and 8.9% of studies coded (n = 14) were identified as not operationalizing PA according to the literature. The average MMAT score of studies that did not operationalize PA accordingly to the literature was 86.1% whereas the average MMAT score of studies that did operationalize PA accordingly to the literature was 86.2%. This demonstrates that first, inconsistencies in defining PA are minimal (e.g., only 14 out of 155 studies evaluated), and second, that the quality of scientific methodological rigor for studies does not significantly differ when there are differences when PA is correctly operationalized or not.

## DISCUSSION

In this study, my main research objectives were twofold: first, to assess the quality of scientific research on PA, and second, to investigate whether the quality of PA research improved over time. I also examined whether research on PA can be considered pseudoscientific. I achieved these objectives by employing the Mixed Methods Appraisal Tool (MMAT) to evaluate the quality of peer-reviewed research articles related to PA. My data collection extended from the studies identified by Harman and colleagues (2022) to March 2023. To ensure rigorous assessment, the MMAT was coded by a team consisting of two undergraduate research assistants and three doctoral students.

### **Quality of Parental Alienation Research**

My findings reveal that the quality of PA research consistently exhibited a high level of scientific rigor. Contrary to my initial hypothesis that the quality might have improved over time, there was no compelling evidence to suggest a temporal increase in research quality. Instead, regardless of the publication year, the overall quality of PA research remained robust. This finding underscores the ongoing dedication of researchers in the field to maintain rigorous standards. Despite this, it is important to note that my analysis did not incorporate studies published in books, in non-English foreign studies, and other sources outside my inclusion criteria. It is possible that a further dive into these studies could demonstrate an increase in PA scientific rigor over time, particularly in regard to early research on PA that was more likely to be published within books or book chapters.

It is worth noting that the variation in research quality between different types of studies was minimal (see Figure 1). Surprisingly, the inclusion of mixed methodologies, though minimal in increasing quality of research standards, was not significantly different from qualitative or

quantitative methods alone in the current state of PA research. This finding suggests that the field as a whole has upheld a commendable level of methodological rigor across various research approaches. Furthermore, this was not enough evidence to suggest that PA research is pseudoscientific in nature, but to the contrary, the majority of PA research has consistently avoided several red flags or indicators inherent in pseudoscientific research. Furthermore, it is important to note that even when some studies were not in consensus with the correct operationalization of PA accordingly to the literary that this did not hinder the quality of scientific rigor for these studies.

### **Comparison with Existing Literature**

My findings somewhat contradict the conclusions drawn by Saini et al. (2016), who had reported less favorable assessments of PA research quality. This discrepancy could be attributed to the fact that my study evaluated a broader range of research methodologies and benefited from the utilization of the MMAT (2018) as opposed to the GRADE (2023) framework. Additionally, a substantial volume of PA research emerged after the review conducted by Saini and colleagues (2016), as indicated in the comprehensive review by Harman et al. (2022) and through my own evaluation. These newer studies may have significantly contributed to my findings, reflecting a positive shift in diverse research quality over time that could not be captured through this study's use of the MMAT (2018).

### **Methodological Limitations**

While my study provides valuable insights into the quality of PA research, it is not without limitations. Despite rigorous consensus-building processes among coders, the presence of inherent biases cannot be completely ruled out. The involvement of PhD students who may have vested interests in PA research could have influenced coder judgments. This includes the

principal investigator for this study who not only studies PA, but works directly under someone who has a vested interest in PA. However, measures were taken to minimize social-desirability bias among all coders as described in the Methods above. Furthermore, while the majority coders were not informed of the study's specific purpose, it is possible that they inferred it over the course of the coding process. A more significant limitation of my study pertains to the inaccessibility of some empirical studies on PA, and the decision to include only those studies accessible in the English language. The exclusion criterion, albeit limited, may have affected the overall assessment of PA research quality. Future research in this area should aim to overcome such accessibility challenges to provide a more comprehensive evaluation of this field of study.

As mentioned before, this study only incorporated peer reviewed sources found in scientific journals and dissertations. Additionally scholastic resources, such as studies not including data, those studies found in other languages, and studies found within books and book chapters may shed additional light on PA quality. Furthermore, other studies and articles that are not empirical in nature are still scholarly and would provide additional insight not evaluated in the current study.

### **Future Research**

To provide a more comprehensive assessment of PA research quality, future studies should consider including unpublished research, gray literature, and studies not available in English. This would help reduce potential publication bias and offer a more inclusive view of the field. Researchers in the field of PA could collaborate to develop standardized guidelines for assessing research quality specific to PA studies. These guidelines would facilitate consistent quality evaluations and enhance the comparability of findings across studies.

Researchers can also continue to refine and validate measurement tools specific to PA, which can include developing reliable and valid instruments to assess the presence and severity of PA, as well as evaluating the impact of interventions on affected families. Additionally, encouraging interdisciplinary collaboration among researchers, psychologists, lawyers, and social workers can lead to a more holistic understanding of PA. Regardless of these limitations, it is important to reiterate that the 155 studies included in this review were high in scientific rigor, and so confidence can be placed in their findings. Furthermore, studies and critiques who find contradictory or parallel outcome of PA phenomenon can and should be synthesized into the PA field as these insights, both methodology flawed and methodologically sound, contribute to the scientific robustness for the field in different ways (see Rowen & Emery, 2018 in introduction; a critique yet included in the refinement of PA literature).

### **Impact of Findings**

The quality assessment of PA research holds significance beyond academia. Many individuals who experienced PA as children have voiced the profound and lasting impacts it has had on their lives, as well as both the difficulty and joy of reconciling with an alienated parent (Baker, 20005; Godbout & Parent, 2012; r/ParentalAlienation, 2023). Furthermore, feeling recognized and validated has been expressed by many as being both helpful and healing, whereas claims by critics that PA is not real is experienced as damaging and hurtful by these adults who suffered alienation as children. My findings, which affirm the high scientific rigor of PA research, validate their experiences. For these individuals, the recognition and validation of their experiences are crucial for healing and recovery. Additionally, the critique of PA research's quality and legitimacy by critics informs policy and reform discussions at the governmental level. My study, in conjunction with other reviews and evaluations, contributes valuable

information for policymakers during the decision-making process for reforms and policy changes related to PA.

## **Conclusion**

In conclusion, my study contributes to the ongoing dialogue surrounding the quality of PA research by affirming its robust scientific rigor and highlighting the field's commitment to maintaining high standards. While I acknowledge limitations in my methodology, my findings offer important insights for both individuals affected by PA and policymakers tasked with addressing this complex issue. Further research in this area should continue to assess and improve the quality of PA research to benefit those directly impacted and inform effective policy decisions.

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APPENDIX

Appendix 1

*MMAT with Parental Alienation Question Added*

Questions		Responses		
		Yes	No	Can't Tell
<b>Screening questions (for all types)</b>	S1. Are there clear research questions?			
	S2. Does the collected data able to address the research questions?			

<b>Operationalization question (for all types)</b>	O1. Does the article operationalize Parental Alienation consistent with the literature?			
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**Category of study designs**

<b>1. Qualitative</b>	1.1. Is the qualitative approach appropriate to answer the research question?			
	1.2. Are the qualitative data collection methods adequate to address the research question?			
	1.3. Are the findings adequately derived from the data?			
	1.4. Is the interpretation of results sufficiently substantiated by data?			
	1.5. Is there coherence between qualitative data sources, collection, analysis and interpretation?			

<b>2. Quantitative randomized controlled trials</b>	2.1. Is randomization appropriately performed?	Green	Red	Yellow
	2.2. Are the groups comparable at baseline?	Green	Red	Yellow
	2.3. Are there complete outcome data?	Green	Red	Yellow
	2.4. Are outcome assessors blinded to the intervention provided?	Green	Red	Yellow
	2.5. Did the participants adhere to the assigned intervention?	Green	Red	Yellow

<b>3. Quantitative nonrandomized</b>	3.1. Are the participants representative of the target population?	Green	Red	Yellow
	3.2. Are measurements appropriate regarding both the outcome and intervention (or exposure)?	Green	Red	Yellow
	3.3. Are there complete outcome data?	Green	Red	Yellow
	3.4. Are the confounders accounted for in the design and analysis?	Green	Red	Yellow
	3.5. During the study period, is the intervention administered (or exposure occurred) as intended?	Green	Red	Yellow

<b>4. Quantitative descriptive</b>	4.1. Is the sampling strategy relevant to address the research question?	Green	Red	Yellow
	4.2. Is the sample representative of the target population?	Green	Red	Yellow
	4.3. Are the measurements appropriate?	Green	Red	Yellow
	4.4. Is the risk of nonresponse bias low?	Green	Red	Yellow
	4.5. Is the statistical analysis appropriate to answer the research question?	Green	Red	Yellow

<b>5. Mixed methods</b>	5.1. Is there an adequate rationale for using a mixed methods design to address the research question?	Green	Red	Yellow
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**(complete this section + section 1 + (3,4, or 5))**

- 5.2. Are the different components of the study effectively integrated to answer the research question?
- 5.3. Are the outputs of the integration of qualitative and quantitative components adequately interpreted?
- 5.4. Are divergences and inconsistencies between quantitative and qualitative results adequately addressed?
- 5.5. Do the different components of the study adhere to the quality criteria of each tradition of the methods involved?


*Note:* The MMAT was adapted to add one additional question. See question O1.