




The Perspectives of Senior Researchers in Applied Disciplines on the Current State of Developmental Attachment Research: An Interview Study

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Abstract

Based on interviews with leading researchers and researcher-clinicians in fields allied to attachment research, this paper describes participants' perceptions of contemporary attachment research in the developmental tradition. Semi-structured qualitative interviews were conducted with 13 research leaders in applied disciplines cognate to attachment research. Participants perceived attachment research as having played a foundational role for developmental science, including highlighting the importance of a developmental perspective and attention to early caregiving experiences. They also identified important contemporary strengths in developmental attachment research, including the observational acuity and insightfulness of its measures, its attention to dyadic processes in contrast to much of biomedicine, the development of a number of attachment-based interventions with well-articulated mechanisms of action, and the capacity of developmental attachment concepts to resonate with clinical and popular audiences. However, participants suggested that the developmental tradition is also perceived as having a comparatively high “cost of entry,” and consequently they warned that it has become somewhat separated from wider developmental science, with its growing prominence of biological research, scalability of methods, and less reliance on theory. Participants perceived both strengths and weaknesses to contemporary developmental attachment research. However they felt that the classic concerns of developmental attachment research were placing the field potentially at odds with current trends in developmental science.

Keywords

applied research, attachment research, knowledge, strengths, weaknesses

Introduction

Attachment research is a longstanding research program within developmental psychology, and has shaped wider contemporary discourses about human socioemotional development, relationships and family life (Cassidy & Shaver, 2016; Duschinsky, 2020; Thompson et al., 2021). Attachment concepts have been taken up and popularized internationally among clinicians and child welfare professionals, in the fields of psychotherapy and parenting guidance, and in areas of social and health policy (Duschinsky et al., 2021; Holmes & Slade, 2017; Steele & Steele, 2018). In a Department for Education (2018) report on “children in need” in England and evidence-based practice, attachment theory was by far the most frequently cited influence on practice.

One important question about the influence of developmental attachment research has been its translation into practice. The use of attachment research within social work has come under scrutiny, for example,

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prompted by concerns about the misapplication of attachment theory and assessments in child welfare contexts (Granqvist, 2016; White et al., 2019), or at least materially different conceptualizations of attachment theory between basic and applied contexts (Barone & Cassibba, 2022; Duschinsky et al., 2021). Such concerns have led to two recent international consensus statements by the community of attachment researchers (Forslund et al., 2022; Granqvist et al., 2017) and a small number of emergent empirical studies (e.g., Beckwith et al., 2022; Hammarlund et al., 2022; North, 2019; Sørberg Bjerre et al., 2023).

Another question is the reception of attachment research in other areas of academic study. The relationship with anthropology has seen welcome discussion (e.g., Otto & Keller, 2014; Quinn & Mageo, 2013), prompted by questions about the cross-cultural applicability of the assessments and conclusions of developmental attachment research. There have also been some general evaluations of attachment research and its relevance within the behavioral sciences addressing early life stress, parenting and child development (Lai & Carr, 2018). However, these discussions have been commentaries rather than based on empirical research. Despite some new studies (e.g., Beckwith et al., 2022; Schuengel et al., 2021), relatively little still remains known about the reception of developmental attachment research among non-attachment researchers in applied and clinical areas, such as public health, child and adolescent psychiatry and developmental health sciences. The need for better understanding of this reception has been highlighted through calls by attachment researchers and commentators for stock-taking regarding the current and potential relevance and contributions of attachment research to the rest of the clinical and developmental sciences (e.g., Behrens, 2021; Thompson et al., 2021; Waters et al., 2021).

Questions of reception have also been highlighted by the decision by the National Institute of Mental Health (2016) to remove the Ainsworth Strange Situation from its list of recommended procedures for publicly funded mental health research. Issues of esteem and perceived pertinence within scientific inquiry, as well as facilitators and obstacles to the flows of knowledge, are also of broader interest for the history and sociology of science. For instance, considering the NIMH incident from the perspective of the history of science, Duschinsky (2020) has characterized the decision as made possible by a combination of misunderstanding and a certain disfavor into which attachment research has fallen among certain quarters of the academic psychology community.

The purpose of the present study is to explore the perceptions of attachment research and its current strengths and weaknesses among scholars with leading roles in

allied disciplines. Its novel contribution lies in being the first empirical study of how applied researchers and researcher-practitioners outside of attachment research perceive its historic and current potential contributions. The study was commissioned by Pasco Fearon, Chair of the Society for Emotion and Attachment Studies, the largest network of academics and clinicians working on the study of attachment, to help the field of attachment research think about future strategy. As such, one goal is to identify opportunities and threats for the developmental tradition of attachment research, and contribute to the wider international conversation taking place about priorities for the field. A second goal is to contribute to the very limited sociological research undertaken on the contemporary state and reception of attachment research in the broader landscape of allied research disciplines.

Methodology

Study Design

A qualitative methodology was adopted since the focus was to explore perceptions of attachment research and its potential contribution among researchers in applied and clinical areas. There were several inclusion criteria for participants: (1) they were required to have been directly involved in clinical or child welfare research in leading roles for at least 5 years; (2) to have published in at least one of the fields of public health, child and adolescent psychiatry, or applied developmental health sciences; and (3) to have some knowledge of attachment research, as assessed by examination of citations in published papers. An exclusion criterion was that participants could not be attachment researchers themselves. This was assessed by regular use of attachment measures, or publications with “attachment” in the title, in the past 5 years.

Participant Selection. Drawing on a snowball sampling method, beginning with researchers suggested by three senior researchers in the attachment community—Pasco Fearon, Carlo Schuengel and Sheri Madigan—31 individuals were invited to take part. They were told about the aims of the study, and the identities of the researchers. Twenty-one expressed interest and, of these, 13 took part (Table 1). Interviews were conducted between October 2019 and February 2020. There were no identifiable differences—in terms of discipline, institution location or length of experience—between those who agreed to take part and those who did not.

All participants were researcher leaders, with research experience ranging from 15 to 40 years. All were internationally eminent, with numerous prizes and other markers of esteem. The interviews lasted between 30 and 60 min, and were conducted via Skype, audio recorded and transcribed verbatim. Research ethics approval was

Table 1. Participants.

Pseudonym	Current institution	Predominant discipline
1# Maria	Europe	Applied developmental health sciences
2# Paolo	Europe	Applied developmental health sciences
3# Tony	Europe	Applied developmental health sciences
4# Craig	North America	Applied developmental health sciences
5# Patrick	North America	Applied developmental health sciences
6# Paz	North America	Applied developmental health sciences
6# Ada	Africa	Child psychiatry
7# Amina	Africa	Child psychiatry
8# Ethan	Europe	Child psychiatry
9# Martin	Europe	Child psychiatry
10# Sar0ah	Europe	Child psychiatry
11# Matthew	Africa	Public health
12# Felix	Europe	Public health

granted by the University of Cambridge Department of Psychology Ethics Committee [ref. PRE.2019.06].

Data Collection. Semi-structured interviews were used. Participants were first asked about their research experience and what difficulties they face in their research field that relate to parent-child relationships. This was followed up by asking about the potential relevance of attachment research for their work. They were also asked what, if any, attachment research they had read recently. Participant views on the strengths, weaknesses, threats, and opportunities for the field of developmental attachment research were then explored in depth.

The study was led by two social scientists, the first two authors, without ties to attachment research, but with consultation and support from Pasco Fearon, Carlo Schuengel and Sheri Madigan as well as from Robbie Duschinsky and his research group, who have conducted previous work studying attachment research from a sociological perspective (e.g., Spies & Duschinsky, 2021). The goal in having non-attachment researchers conduct the interviews was to increase the likelihood that participants would feel comfortable openly discussing their views on the attachment field.

The data were analyzed using reflexive thematic analysis, an approach particularly suitable for identifying the salient aspects of the perspectives of participants regarding a topic (Braun & Clarke, 2006, 2019). It is also an approach well suited for supporting researcher reflexivity, which was particularly important in this case. We followed the six phases of reflexive thematic analysis: (1)

familiarization with transcripts, (2) coding the transcripts, (3) generating initial themes, (4) developing and reviewing themes, (5) refining, defining, and naming themes, and (6) writing up. In line with the methodology, these phases were not necessarily fixed steps undertaken in succession, but moved through in an iterative way. Our analysis generated five themes, each addressed in a section below.

We followed best practice guidance in producing trustworthy qualitative research using reflexive analysis (Nowell et al., 2017; Yilmaz, 2013). This included having transcripts coded separately by the two lead researchers, with codes then discussed with the other members of the research team, and consensus sought through conferencing. Regular supervision and discussion supported reflexivity among the research team. In this way, we hoped to gain the benefits and independence of an outsider's perspective but with access to the knowledge of experienced attachment researchers and other researchers who have previously examined the historical and sociological position of attachment research. Our inquiry is a response to a desire for stock-taking within the research community: it is premised on both the great potential value of developmental attachment research and on concern for its limitations, and we have attempted to avoid losing sight of either.

Results

Below we outline five themes identified from the analysis which offer a complex response to our enquiry. This included the seemingly paradoxical notion that the attachment field is both rather inaccessible to proximal "outsiders" (especially in its methods and theory), yet also widely considered digestible by the lay public (especially in its theory). The first two themes presented here are suggestive of both under- and over- engagement with attachment concepts. The latter three themes address underpinning ideologies and change in the priorities of scientific inquiry which may be shaping this reception.

Bounded Field of Inquiry

All our participants presented developmental attachment research as a tightly bounded field, with a strong historic tradition of contributing to science, but with comparatively poor dialog and mutual exchange with other areas of psychology and the social sciences. Whilst there was respect for the achievements and identity of attachment as a distinct research tradition, the strong boundaries of developmental attachment research were regarded by participants as, on the whole, a negative characteristic of the field. That is, attachment was seen by participants to

be somewhat “closed off” to cognate fields, with weaker circulation of new knowledge into and out of the area of inquiry than other equivalent areas of research. The field of developmental attachment research was described by Felix [participant #12] as having “*become a bit marginalised.*”

Participants reflected that in the 1980s and early 1990s, developmental psychology was structured around different traditions, and the strong identity of attachment research made sense and was adaptive in this context. Reflecting back on his career in developmental psychology, Patrick [participant #5] stated:

When I entered the field, which was in the 1980s, the discourse was very fragmented, and I think there was a much greater sense of you had to be in a specific camp... you either came from a more psychodynamic and attachment tradition or you came from a more behavioural and social learning tradition.

Participants described considerable changes in this regard. Theoretical and methodological pluralism and interdisciplinarity is now regarded as a better, and more scientific, attitude. However participants felt that the attachment research community had not moved with the times in this regard, and that it remains somewhat theoretically and/or methodologically insular compared to other areas of inquiry in developmental science. They characterized the strong boundaries of developmental attachment research as, essentially, rather anachronistic.

The “closed-off” character of attachment research was considered by participants to be based primarily in the long and intensive training in methods required to undertake developmental attachment research. Compared to other areas of research, deep knowledge of developmental attachment theory and methods was also regarded as more difficult to obtain without personal mentorship by an existing attachment researcher and the cultivation of links to one of the research “hubs” of attachment research.

The laborious nature of attachment measures was the primary obstacle raised by Ada: “*One of the difficulties we have is that a lot of the attachment tools require a lot of training and validation... that makes it difficult for us to encourage our students to use.*” The “price of entry,” both financially and in terms of time commitment, to participate in developmental attachment research was regarded as too high for “outsiders” to undertake attachment research. This was all the more the case for researchers at some geographical distance from the main “hubs” of attachment research in North America and Europe. Ada [participant #6] highlighted that this was a barrier for her group since “*to get the training in South Africa is going to be very expensive.*”

The resource and time intensity, and thus the degree of exclusivity of investment, required for the

enculturation and training of developmental attachment researchers, was regarded by participants as at odds with the current research ecology. Participants indicated that in contemporary academic psychology researchers are now often expected to be able to enter and exit particular methodologies or areas of inquiry more rapidly, and seek collaboration and nourishment for their research from various sources. Felix [participant #12] compared the approach of developmental attachment researchers, which he characterized as a “1980s” research culture, to his own model of researcher training: “*if I train a good epidemiologist, he will go to different schools to learn the difference.*” The intensive training in complex observational measures was perceived to offer strengths for attachment research, in terms of the acuity of the measures and depth of understanding of a complex theoretical model, but participants highlighted that this stood in tension with the priorities and conception of science that have come to dominate in academic psychology.

Practitioner Audiences

While attachment was described as a relatively bounded and autonomous field within developmental psychology, participants characterized discourses of attachment as having a distinctively unbounded appeal to non-academic audiences. Maria [participant 1#] commented on the public recognition of attachment: a “*well recognized brand,*” as “*everybody knows the word attachment, even people outside of the world of psychology... Anybody out in the street will recognize the word attachment.*” Attachment was perceived as an accessible form of psychological knowledge, with Ada [participant #6] specifying that what makes attachment “*transferable and digestible for the public*” is “*that it is universal.*” Ada emphasized that developmental attachment research has a profound strength in its capacity to “*transmit the knowledge to a wider circle.*”

The use of attachment theory in social work was especially highlighted by participants. Amina [participant #7] reported that social services will often “*look for the literature to support*” their decisions. Attachment theory was regarded as having an accessible, and easily understood, “core” set of messages, such as the importance of early relationships, and the role of caregiving in shaping children’s expectations about close relationships. But the theory and research was regarded as intricate, and participants expressed concern that these intricacies were not well recognized in clinical and child welfare practice, with greater discrepancy between researchers and practitioners than other cognate areas of knowledge. In practice settings, ideas about attachment and the findings of attachment research were regarded by participants as too often simplified or confused, especially when there

was overreliance on early formulations of Bowlby such as regarding maternal deprivation. Amina [participant #7] reflected on the risk of popular misunderstanding and confusion surrounding attachment concepts:

A study with postnatal nurses who considered themselves quite familiar with attachment concepts, and the single most worrying thing...was that they equated successful breastfeeding with having a good attachment relationship. We know this isn't necessarily true...when you look at what's the lack of awareness, it starts at the point at which these are supposed to be the healthcare providers, really at the tertiary level, giving input to high risk mothers and so are considered the most trained.

In the description Amina provides, there is an illusion of fluency with attachment concepts and knowledge, while the intricacies of the attachment relationship are reduced to the single act of breastfeeding. She felt that this was a risk in the reception of developmental attachment research more than other areas of inquiry in developmental science.

Participants felt that academic researchers in cognate fields, such as themselves, were generally more aware than practitioners of the difference between the simplified popular and intricate scholarly faces of attachment knowledge. They were highly respectful of foundational intellectual tenets that attachment research had given to other areas of knowledge: in particular, the vital importance of a developmental perspective, and the importance of early caregiving for later development. However the “price of entry” to further or contemporary theoretical or methodological-observational insights was regarded as too high to facilitate transmission of more subtle and sophisticated points, such as regarding moderators and mediators of the effects of early care for children’s development.

An example raised by many participants was research in child psychiatry: despite its historic importance, and with a few exceptions, developmental attachment research was not perceived as all that relevant by contemporary researchers in psychiatry. A researcher in this field, Tony stated: “*I have to say that [attachment is] not on my radar right now.*” Furthermore, Martin [participant #9] suggested that “*child psychiatry has stood on the side lines really, not because it was rejecting anything but simply because it couldn't be bothered to come to terms with it all.*” These remarks suggest a relative under-engagement with contemporary developmental attachment research by child psychiatry as a discipline, rather than outright rejection or disagreement. Sarah [participant #10], a child and adolescent psychiatrist, reported that attachment research was seen to be “*kind of, esoteric*” by academic psychiatry. Across all the interviews, none of our participants made any reference to the psychiatric category of “attachment disorder,” seemingly

reflecting the perception that this diagnostic category was not relevant to an evaluation of the current state or future possibilities of the developmental attachment research tradition.

Participants offered qualified praise of work by developmental attachment researchers in developing and studying the effects of attachment-based interventions. Participants were interested by evidence of effectiveness stemming from trials research, and generally perceived attachment-based interventions as a strength of the field. Some attachment-based interventions were regarded as effectively articulating their anticipated targets of intervention and mechanisms of effect. However some participants were worried that interventions invoking the technical concept of “sensitivity” as the target of intervention could be misinterpreted by practitioner audiences unaware of the intricacies of what is intended by the term, and assume the ordinary language associations in how they work with families. Felix [participant #12] in particular was also worried about interventions that invoked the rather vague concept of “attachment” to account for causal processes. He anticipated that attachment-based interventions “*wouldn't work through the theoretical mechanisms that you would assume based on the attachment,*” hindering the generation of cumulative knowledge and researcher-practitioner communication.

Science and Religion

Almost all participants characterized attachment researchers as strongly identified with their field, an attitude they regarded as unscientific. Craig [participant #4] reflected:

I think my problem with the, with the field of attachment is, I see too many ideologues and too much ideology. It's kind of like, this is what Mary said. This is what Bowlby said. This is what Sroufe said. So, it's almost like, you know, if you don't jump into that, then you're the equivalent of a Protestant.

This “unscientific” commitment to a specific theory was contrasted to a presentation of themselves as scientific in their dispassionate appraisal and utilization of various domains of knowledge. Theoretical fidelity was regarded in principle as a barrier to scientific understanding. Maria [participant #1] wanted it understood that she was not “*in any of the scientific silos.*” Echoing this sentiment, Ethan [participant #8] claimed he was a “*jack of all trades and master of none,*” meaning he could “*get by in almost every area of psychological or biological research.*”

Attachment researchers were also regarded as uncritically wedded to their theory, with Patrick [participant #5] stating that “*there's still a bit of the [process where] you put forth the theory and then you become the defender of the theory, and you see confirmatory evidence.*” This

was seen as a “*kind of orthodoxy...that limits empirical knowledge.*” Empirical knowledge and scientific truth were repeatedly contrasted in the interviews to the commitment to a particular psychological theory in academic attachment research. Ethan [participant #8] criticized the “*zealousness with which attachment proponents promote their view,*” which he suggested “*makes it very difficult to refute models scientifically, because they set them up as a meta-theory or in philosophy of science as a worldview, more than a scientific hypothesis.*” This approach to theory, he felt, hindered the transmission of new and valuable knowledge and perspectives from the efforts of attachment researchers into the wider field of developmental science, and vice versa.

For Felix [participant #12], the commitment of attachment researchers to a particular “*one large overarching theory... to most people that would be nearly absurd,*” and reduced the seriousness with which the empirical findings of attachment researchers were viewed by him. The “proper” scientific relationship to theory was suggested by Matthew [participant #11], who stated:

“Almost every knowledge kind of domain that exists for me, it’s like Popper’s... Where you’re always trying to disprove the theory, that’s how it grows. And you just posit something, you then get some more data, and you move on.”

Here, Matthew refers to Popper’s (1963) theory of falsification: the notion that what distinguishes scientific knowledge from other knowledge forms is the falsifiability of theories. As scientific theories are all, by nature, fallible, the building of a cumulative research paradigm around a particular theory was regarded with suspicion by many of our participants, and most strongly by those in applied developmental health sciences. They contrasted the nimbleness of their flexible responsiveness to empirical truth, or perhaps the nimbleness to which they ideally aspired, with what they characterized as the inflexibility of attachment research. Whilst theory was described as a necessary part of academic inquiry, in practice participants treated it with suspicion, except where theories were quite specific and could be held extremely loosely.

Participants did not seem aware of, or at least did not acknowledge, the way the community of attachment researchers in the developmental tradition have been responsive to empirical findings and adapted their conception of attachment theory, including specific extensions, substitutions, and abandonment of earlier elements. Participants also did not seem aware of, or at least did not acknowledge, developments in the assessments used by attachment researchers since the 1990s. What they perceived was largely continuities in theory and method from the 1980s to the present.

Hierarchies of Knowledge

As well as a reduced role for larger theoretical frameworks, participants also highlighted other methodological and epistemic changes within psychology, including a growing and interrelated focus on larger samples, the scalability of measures, and replication. Felix [participant #12], an epidemiologist, was supportive of this trend:

I believe that we need large studies to understand effects, to control for other factors, to understand interaction of factors, ... child development has focused on smaller sample sizes and has felt that they can do the work [in] studies of three, four hundred, which I think is just an illusion.

The resource-intensity of attachment measures and resulting tendency toward small-scale observational studies was regarded as a barrier to the relevance of attachment methods to this modernizing enterprise or to drawing robust scientific conclusions from studies using them. Matthew [participant #11], an academic working in Global Health, a field typically dedicated to large, population-based studies, was frustrated at the lack of scalability of existing attachment measures in the developmental tradition for his area of study:

You’ve got to go through years of coding training, reliability training, to then spend 3 hours per script. Great, that’s nice for your particular kind of journals... I’m not interested in that.

In recent years attachment researchers have made efforts to circumvent the limitations of the field’s resource-intensive measures, for instance through embedding attachment measures within larger cohort studies (e.g., Jaddoe et al., 2012), the use of individual-participant data meta-analysis (e.g., Verhage et al., 2020), and the use of these measures as outcome measures within Randomized Control Trials – which require considerable resources to begin with (e.g., M. Van IJzendoorn et al., 2023). There have also been outright attempts to adapt traditional measures for scalability without losing their validity or richness, such as the AMBIANCE-Brief (Cooke et al., 2020). These efforts were not addressed by participants; whether they did not know of them or whether they felt they were unrepresentative, in general participants characterized the culture of developmental attachment research as still oriented by what they perceived to be low-status forms of knowledge such as small-scale observational studies using labor-intensive methods. Furthermore, whilst attachment research in the social psychological tradition does use more scalable measures, this work was not considered as an alternative by participants.

Several participants highlighted that the Ainsworth Strange Situation was created to align with the demands

of academic psychology at the time; it reflected the formation of the attachment field by the disciplinary pressures of the 1960s and 1970s. Among other participants, Matthew [participant #11] argued the attachment field needs to, once again, take heed of wider disciplinary demands if it is to survive. He urged that attachment has:

Got to develop some instruments that are vaguely useful at scale..., the field can't move because of its measurements. When your gold standard is so time consuming, you have an inbuilt problem, you're not going to develop.

Yet many participants also highlighted strengths of the observational methods and attention to dyadic processes cultivated by developmental attachment researchers, and did not want to see these left behind. Amina [participant #7], a child psychiatrist and psychiatric researcher, suggested that “*the most important strength [of the attachment field] is the skill of observation.*” She contrasted the valuable observational measures of attachment and the attention to dyadic—rather than solely individual—processes with her own training in medicine and more generally the diagnosis-centric perspective of much biomedical research.

The Biological Turn

A further disciplinary hierarchy that emerged from the interviews was the move to the life sciences in developmental science, with the increasing influence of neuroscientific and genetic research. Matthew [participant #11] suggested psychological research should be led by these biological approaches, questioning, “*What is the current brain research? What does the current genetics research tell us? That's what we should be starting with.*” Whilst others did not necessarily hold that biological approaches should take the lead, except among some of the most clinically applied participants there was a common hierarchical valuation of disciplines and subdisciplines, with those linked to the life sciences being prioritized and as having greater access to foundational truths. For instance, Craig [participant #4] stated that “*neuroscience is really just turning up the power of the microscope and trying to see how the mind is actually working.*” Many of our participants seemed to hold the view that a comprehensive understanding of psychological phenomena could only be obtained if biological research was utilized. Matthew [participant #11] suggested that “*without genetic research, all of this is purely hypothetical because everything would be, in some ways, influenced by genes... It has to be by genetics.*”

Despite an original basis in ethology, the developmental attachment field was not, on the whole, seen as

receptive to the biological turn in developmental research. Felix [participant #12] claimed attachment researchers:

Have struggled to integrate their work with biological work. They do a bit of half-hearted genetic research, but not really well. They don't know what to do with the genetic, epigenetic, really, they just don't know.

With exceptions, attachment researchers were generally not seen to have much experience in biological research and use of biological measures. As a result, attachment research was perceived as struggling to keep up with the disciplinary direction of the wider field of developmental research. Tony [participant #3] suggested that a “*threat for attachment is making itself irrelevant to what's happening right now, the kind of cutting edge stuff that's trending in psychiatry journals.*” It was felt that developmental attachment research would need a renewed and pervasive adoption of biological theory and methods, with a full updating of the classical ethological basis of the paradigm, if it was to remain relevant in contemporary developmental science. Indeed, Tony stated that by “*incorporating genes and brain imaging,*” attachment research would be able to “*show that these patterns are really important.*” Biological research was seen by most participants to be of a higher scientific standard—a way of showing something was genuinely important—when compared with the knowledge produced through attachment measures or other forms of social or observational measurement.

However, a few participants had a different perspective. Those researchers whose own work focused more on intervention research identified that genetic and neuroscientific research had less relevance to clinical research and practice than work on the development and evaluation of attachment-based interventions such as Attachment and Biobehavioural Catch-up (ABC) and Video-feedback Intervention to promote Positive Parenting (VIPP) (see Dozier & Bernard, 2017; Steele & Steele, 2018; M. Van IJzendoorn et al., 2023). Patrick [participant #5] suggested “*you can complement the practitioner observation with increasingly readily collected biomarkers,*” a complimentary, as opposed to hierarchical, valuation of biological research and observational methods. Indeed, both ABC and VIPP have used biological assessments of participants as part of evaluating and refining their respective interventions. Overall, while almost all participants treated biological research as more “scientific” or “valid” than the observational measures traditionally associated with developmental attachment research, few, if any, suggested that neuroscientific or genetics research could entirely replace other forms of

psychological research, especially for a program of research anticipating clinical relevance.

Discussion

In 1987, M. H. Van IJzendoorn and Tavecchio (1987), two developmental scientists who straddle attachment and wider developmental research, posited that developmental attachment research was dependent upon laborious measures, arcane theory, and a culture of cliques, drawing boundaries between insiders and outsiders. At that time, they concluded that the price of this insularity was well worth it in terms of the value of the insights of attachment research. Subsequently, Duschinsky (2020) has observed that the capacity of developmental attachment research to sustain itself with grants and recruitment of able young researchers has been hindered by the conflict between the high price of entry of the attachment field and the pressures of a wider research culture in developmental psychology. He raises the question of whether developmental attachment research is facing exhaustion, ultimately concluding that it is not, pointing to green shoots such as developments in individual participant data meta-analysis and attachment-based interventions. Similar conclusions have been drawn by M. H. Van IJzendoorn and Bakermans-Kranenburg (2021). They highlight challenges such as problems of miscommunication and missed opportunities for mutual learning between developmental attachment researchers and practitioners as threatening the paradigm with exhaustion. However they also point to green shoots, which for them include a growing engagement with neurobiology and the absorption of Bowlby's old theory into broader interdisciplinary frameworks.

Our participants also perceived considerable strengths in contemporary attachment research in the developmental tradition. These strengths included its observational measures, the attention to dyadic processes, those attachment-based interventions with well-articulated mechanisms of action, and the resonance of attachment ideas with diverse audiences. However, they also characterized developmental attachment research as generally rather closed-off to other research fields, for all that they could identify specific researchers as exceptions, with obstacles to the circulation of new knowledge into and out of attachment research. Most apparent was the notion that the attachment field might be "unscientific" in an undue indebtedness to theory, within a context in which a primary role for theory has fallen out of favor within academic psychology and is even treated with a certain degree of suspicion, as contrary to methodological and empirical openness (Beller & Bender, 2017; Berghaus, 2011).

Participants described the dispassionate appraisal and utilization of various domains of knowledge required of a contemporary developmental scientist such as themselves. There seemed a rhetorical need for an "outside" to this self-depiction, with attachment research treated as suited for the role. This characterization was not hostile in tone in the interviews; participants saw attachment research as of great potential value, and offered their time for interview because they wanted to help sustain and support the area of inquiry. However they felt that this value was undermined by a specific predicament: what attachment researchers held as an asset, the way attachment theory offered a framework for the generation of cumulative knowledge, actually was not simply anachronistic but in fact a central obstacle to the generation of cumulative scientific knowledge according to the epistemic standards of contemporary, theory-light, academic psychology.

Participants also noted the inaccessibility of the intricacies of theory and methods in the developmental tradition of attachment research, and where much of the richness of the insight of developmental attachment research was held to rest. For instance, several participants mentioned the labor-intensity of attachment measures, which are an obstacle to their application at scale—a particular priority for contemporary psychological research (Sassenberg & Ditrich, 2019). Participants did not seem aware of current research trends in developmental attachment research toward the construction of brief versions of the classic assessments, such as the AMBIANCE-Brief (Cooke et al., 2020) or the brief version of the Attachment Q-Sort (Cadman et al., 2018).

Our study also highlighted the significance of the "biological turn," with many participants characterizing genetic and neuroscientific research as both more exciting and as more "true" than observational research (see Rose & Abi-Rached, 2013). M. H. Van IJzendoorn and Bakermans-Kranenburg (2021) characterized the use of biological measures as one of the green shoots of contemporary developmental attachment research, and the latest edition of the *Handbook of Attachment* identifies that attachment research has energetically pursued genetic and neuroscientific methods and the use of biomarkers in measurement (Cassidy & Shaver, 2016). Yet our findings suggest developmental attachment research is not viewed by leading scholars from the applied research community as having sufficiently engaged with the biological turn. This is perhaps shaped by preconceptions based on earlier generations of attachment researchers. Alan Sroufe, for instance, at times rhetorically opposed observational to biological measures, seeming to advocate against the latter in seeking to shape a space for the former (Duschinsky, 2020). We were

struck that many of the participants could name current attachment researchers who had conducted research using biological measures. Nonetheless they perceived developmental attachment research as generally behind the times, treating the instances they knew as exceptions rather than the rule.

Participants were at pains to qualify the image of developmental attachment research as closed-off by specifying that this was regarding technical aspects of theory and method. They felt that basic ideas from first and second generation attachment researchers had traveled very effectively beyond academic developmental psychology, particularly to professionals and the general public. Participants observed that, whereas in applied health research and developmental psychology attachment research was somewhat behind the times and had modest explanatory value, within clinical and child welfare practice attachment research is considered highly explanatory and frequently functions as an empirical touchstone for practice. Concepts related to “attachment” are used to provide allied fields with scientific credibility, and allow their actions to be considered “evidence-based practice.” However, participants also suggested that such references to attachment ideas within professional practice can be highly divergent from the core tenets of modern attachment research. Recent consensus statements by attachment researchers have alleged considerable “conceptual confusion” in appeals to attachment concepts by clinicians and social workers (Granqvist et al., 2017). However, it should be noted, this allegation has been based primarily on anecdote, and there remains need for more empirical research on the extent or nature of convergence or divergence in understanding between attachment researchers and their applied audiences (Beckwith et al., 2022).

Limitations

Our research sought to explore potential obstacles and opportunities for developmental attachment research, through examining the perspectives of research leaders in applied cognate disciplines. There are a number of important limitations to our study. Our findings are based on a small, purposive sample of very senior researchers identified as representing the constituencies of applied researchers for whom developmental attachment research should or could be relevant. Whilst suggestive of the concerns of applied researchers in cognate areas, our findings will have limited naturalistic generalizability (Smith, 2018). For example, the decision to exclude researchers who have published papers with attachment in the title was useful for ensuring this study captured the perspectives of knowledge stakeholders but does mean that the findings fail to reflect the perspectives

of those who do manage to move in and out of the field. It may be that the boundary to the developmental attachment field is “semi-permeable,” with exit and re-entry much less costly for those trained in attachment measures than those not. Yet despite uncertainty around the exact nature and scale of the boundary issue, the challenges of entry for non-attachment researchers highlighted in this study is still a noteworthy threat to the developmental attachment tradition’s ability to include the wider pool of research talent or to have injections of fresh ideas from those who trained in other fields. Furthermore, the focus on internationally-renowned researchers is a strength and a limitation. Whilst it attends to the perspective of current leaders in applied research who have influence on the design and interpretation of studies, our sampling strategy did not address the perspectives of early career researchers. This would be an important question for future research, and one with its own urgency for the continuation of the developmental tradition and for the sociological study of developmental science. Future research might also examine barriers to engagement with contemporary developmental attachment research among practitioners, and further explore the challenges in the embedding of attachment-based interventions within child welfare and routine clinical practice (see Oliveira et al., 2022). It would also be valuable for future research to examine the contents of leading developmental science journals, with qualitative or quantitative methods used to study whether or how attachment is “losing ground” in the developmental literature. More generally, the use of bibliometric methods for appraising the current state of attachment research holds out great potential (e.g., Schuengel et al., 2021).

Conclusions

Despite these limitations, our study contributes to the available literature in important ways. We identified several perceived strengths to developmental attachment research, identifying what researchers in applied disciplines valued about the field and its work. The present study also advances on the work of Duschinsky (2020) by examining the “price of entry” to the attachment field from the perspective of contemporary outsiders. Participants described that the time-intensive and inaccessible coding systems, dynamics of personal mentorship, and complex technical theory have led the attachment field to be regarded as inaccessible, and crucially, not an area of inquiry that the “uninitiated” could readily access or contribute to. The perceived excessive commitment to theory, the lack of responsiveness and change in the face of contradictory evidence and slow uptake of biological measures also contributed to the

perception among interviewees of developmental attachment research as behind the times.

Our general sense is that these senior researchers outside the attachment field perceived that attachment research must innovate in its measurements in order to support larger scale, robust research (e.g., population cohorts or large-scale trials) and to become more interdisciplinary and methodologically eclectic in its approach. New methods of measurement, a broader perspective on the underlying phenomena of interest, new research paradigms and designs, and a willingness to challenge central dogmas of the field were being asked for by colleagues in these neighboring fields in order to capitalize most effectively on what they saw as especially valuable in the study of attachment. Attachment research, these commentators contended, should also embrace its original biological roots, for example by engaging more fully with genetics or with developmental or systems neurobiology.

Interviewees appeared to regard that contemporary developmental attachment researchers may need to hold more lightly some of the cherished aspects of earlier eras. Such responsiveness will help attachment research grow and revitalize itself to tackle contemporary scientific and social challenges. Attachment research may also need to improve the effectiveness of communication about the nature and concerns of current attachment research to applied fields, or to develop other responses to the threat of marginalization. Should contemporary developmental attachment researchers wish to make claims for the relevance of their tradition to applied researchers, our findings suggest they may consider highlighting four aspects of current research.

First, they may wish to highlight, and further develop, current efforts to make measures and technical concepts more accessible and translatable. This includes a growing program of work around the AMBIANCE-Brief, though also the brief version of the Attachment Q-Sort, neither of which appeared known by our participants. Renewed efforts might also be undertaken in research and communication with stakeholders to specify concepts like “sensitivity” or “attachment” (Society for Emotion and Attachment Studies, 2021; Verhage et al., 2023). We see considerable value for instance in research by Woodhouse et al. (2020), who have highlighted the specific importance of secure base and safe haven provision, which might otherwise get lost in the concept of “attachment,” both in research and in communication with knowledge stakeholders.

Second, attachment researchers may wish to emphasize the compatibility and fruitfulness of biological measures within developmental attachment research, and/or seek to further integrate observational and biological measures. This could include the integration of

attachment measures within cohort studies - an argument easier to make if the measures are adapted and validated for use at scale. However, more generally attachment researchers may wish to include biological as well as social and psychological measures where this proves feasible. For instance, assessment of hair cortisol has now become dramatically less expensive. A demonstration of the value of measures of cortisol has been in the ongoing series of publications from long-term evaluation of Attachment and Biobehavioral Catch-up (e.g., Garnett et al., 2020), where understanding the regulation or dysregulation of states of arousal using biological measures are used together with observational measures as a crucial part of understanding the mechanisms and consequences of the attachment-based intervention (see also Runze et al., 2022). Use of biological measures such as cortisol may help support two-way dialog with researchers who would otherwise not be able or willing to meet the “price of entry” for delving into the insights available in the Ainsworth interactive scales.

Third, attachment research may wish to emphasize to knowledge stakeholders, and perhaps also seek to ensure, the evolving, open, and undogmatic treatment of propositions in attachment theory. Many of our participants spoke about attachment research as using theory in the wrong way, failing to treat it as a set of falsifiable propositions. Given that we have interview data, the extent to which this is an idealization of how current scientists work is unclear. Nonetheless, it is clear that attachment research remains perceived as somewhat at odds with the theory-light nature of contemporary developmental science, with strong allegiance to a theory treated as necessarily entailing difficulty genuinely listening and responding to criticism. This seems like a stereotype that can be both resisted and contested, and perhaps also noted as a warning for where it does have relevance.

Finally, attachment researchers have a fine line to walk in emphasizing the relevance of attachment research for practice. Our participants highlighted the widespread existing awareness of attachment theory among practitioners, albeit that some of this awareness is based on simplifications or misunderstanding of the technical aspects of attachment measures and concepts. There is opportunity in the considerable audience for attachment-related knowledge. One challenge is in translating existing knowledge effectively; another is translating back from clinical needs to the technical operation of present and future empirical research and elaboration of theory. Our participants perceived the tradition of evidence-based attachment-based interventions as a strength of the field. Attachment researchers may wish to emphasize in communication with stakeholders, and/or prioritize in research, the specific targets and mechanisms articulated

by interventions, making the knowledge produced by their design and evaluation more accessible to applied researchers and practitioners.




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