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Attachment quality is associated with music performance anxiety in professional musicians: an exploratory narrative study

Abstract: *This paper investigates attachment themes in the life history narratives of professional orchestral musicians and their relationship with music performance anxiety (MPA). Narrative accounts derived from open-ended in-depth interviews of ten professional musicians were analysed from an attachment perspective using content and thematic analysis. We hypothesized that the performance setting re-triggers unprocessed feelings related to early attachment experiences, especially when traumatic, and that defensive manoeuvres against their re-emergence into consciousness are activated. The interviews identified early relational trauma as a relevant etiological factor in the MPA-symptomatic of the musicians studied. A case is made for the addition of an attachment-informed life-course model rather than a purely symptomatic approach to understanding and treating severe MPA and other intra-personal psychodynamics of performing musicians.*

Keywords: *attachment theory, attachment quality, attachment narratives, musicians, music performance anxiety*

Introduction

This paper explores attachment themes in the life history narratives of professional musicians. Previous work has explored the relationship between attachment status and the experience of severe music performance anxiety (MPA) (Kenny, 2011; Kenny, Arthey, & Abbass, 2014; Kenny & Holmes, 2015). Here we broaden the investigation to consider developmental links between attachment quality and musicians' perceptions of their musical lives. Specifically, we investigated musicians' early life experiences and attachment relationships with their primary caregivers in order to understand the impact of attachment style on musicians' approach to and experience of their profession in general and their musical performance anxiety in particular.

Theoretical background

Freud's psychoanalytic theory and subsequently John Bowlby's attachment theory (Bowlby, 1940, 1960, 1973, 1988) maintained a developmental perspective founded on the principle that problematic early experiences, particularly within the mother-infant dyad, while not immutable, and interacting with genetic endowment and contingent events, set the scene for later psychopathology. This view has been reinforced by observational studies of infants (Ainsworth, 1963; Ainsworth & Bell, 1970; Beebe & Jaffe, 2008; Beebe, Jaffe, & Lachmann, 2005; Beebe et al., 2010) and longitudinal studies of the outcome of early relational trauma (Cassidy & Shaver, 2008). As Fonagy and colleagues (Fonagy, Target, Gergely, Allen, & Bateman, 2003) stated:

The experience of security is the goal of the attachment system, which...is the foremost regulator of emotional

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experience. In this sense, it lies at the heart of many forms of mental disorder and the entire psychotherapeutic enterprise (p. 37).

The attachment system is not pre-formed at birth; it evolves from the continuous transactions between the infant and the people in his world. From these experiences, in Bowlby's terminology, the child develops internal working models (IWM) that also become more complex and integrated as the child matures. These IWM operate outside of conscious awareness and are resistant to change, but nonetheless guide thought and behaviour in new situations (Goodman, 2005). Faced with severely adverse/traumatic developmental experiences – e.g., physical or sexual exploitation, overt hostility, and/or neglect – children may develop highly defensive, confused or self-defeating IWMs of self, other and self-other relationships (Schimmenti & Caretti, 2016). These confusions typically become defensively dissociated in order to avoid the unbearably painful affect associated with the extreme vulnerability accruing to the realisation that one's caregiver is inaccessible or hostile (Bigelow & Walden, 2009; Blass, Lumeng, & Patil, 2007; Bretherton, 1994).

The interplay of infant-seeking and parental provision results in different patterns of infant-caregiver attachment, depending on the emotional fit between infant behaviours and parental responsiveness. Secure attachments arise out of maternal sensitivity and responsiveness, or 'attunement' (Stern, 1985) to her infant's needs. This sensitive attunement encompasses qualities such as acceptance, psychological availability, and cooperativeness. Recent studies suggest that a crucial factor in this pattern is parental capacity for 'mentalizing' – the ability to see the child as a separate sentient being with thoughts, feelings and needs of her own, distinct from those of the parent (Altman, 2003; Bodin, 1996; Cortina & Liotti, 2010).

Suboptimal parent-child relationships lead to different patterns of insecure attachment. These are seen as adaptive and appropriate responses to the child's primary relationships. Ainsworth, Blehar, Waters, & Wall (1978) differentiated insecure attachment into avoidant (parents are dismissing of attachment needs, leading to de-activation of the attachment system in their children) and ambivalent (parents are preoccupied, leading to hyper-activation of the attachment system in their children) subtypes. These 'organized' patterns of insecure attachment are distinguished from a fourth type – disorganized attachment – in which infants' parents are simultaneously experienced as a safe haven which they seek out when threatened, and the source of danger from which they need protection (Main, Hesse, & Kaplan, 2005).

These early attachment experiences need not necessarily be a life sentence. Positive life events in childhood – e.g., a stressed single mother forming a healthy new relationship – can impact on their children's attachment status, moving them from insecure to secure (Bifulco, 2008). Psychotherapists hope that therapy can help patients move from insecure to secure attachments. Hesse (2008) described how the combination of a fluid-autonomous discourse style with low ratings on parental

lovingness led, in the development of the Adult Attachment Interview, to the concept of 'earned security'. This refers to people whose childhood experience was bleak, but who nevertheless manage to achieve the multilayered and fluid detachment and objectivity corresponding with secure attachment. The construct of 'earned security,' (Roisman, Fortuna, & Holland, 2006), defined as "coherent and secure adult attachment representation despite untoward attachment experiences in childhood" (van IJzendoorn & Bakermans-Kranenburg, 2014, p. 158) is highly relevant to MPA.

In this paper, we test our hypothesis that unrepaired attachment ruptures are associated with the more severe forms of music performance anxiety in professional musicians. Given that this is the first study internationally to examine the association between attachment and music performance anxiety, we are primarily concerned with the distinction between secure and insecure attachment and the implications of these for musical performance, and do not attempt to identify sub-classifications of insecure attachment. A later paper will attempt a more nuanced examination of the different subtypes of insecure attachment in performance anxious musicians.

Attachment and musical performance

What, if any, might be the connection between attachment quality and musical performance? An artistic performance may be thought of as a jointly produced, co-created phenomenon involving audience, performer, and the music itself. This is reminiscent of mother and infant engaged jointly in the free, collaborative, mutually enjoyable play typical of secure attachment. From an attachment perspective play may be compromised in a number of ways: the mother may seem 'bored' and look away (avoidant), preoccupied with her own traumatic or depressed thoughts (ambivalent), or over-identified with the child as a narcissistic projection of her own needs (disorganised) (Hesse & Main, 2000). Transposing these suboptimal prototypes into the musical arena, being called upon to perform can result in anxiety or depression because the fertile, creative and hedonic meeting point between the musician's 'play' and the containing responsiveness of the audience is inherently and perhaps necessarily fragile and regressive. Thus the psycho-physical activity of music-making activates a range of emotions and dispositions reaching backwards into childhood, as well as forward into future aspirations (Kenny, 2011). From this perspective, MPA may be seen as arising out of IWMs of maternal/audience inattention, or a persecutory or narcissistic focus on the child/performer him/herself rather than the music.

Another theme that has influenced our thinking about MPA is that of narcissism (e.g., Kernberg, 2008; Kohut, 1966, 1972). In 'healthy narcissism', people legitimately value their uniqueness and specialness and develop healthy self-esteem on the basis of parental acceptance and pride. This healthy narcissism is a component of the unconditional acceptance and provision of 'narcissistic supplies' (Powell, Cooper, Hoffman, & Marvin, 2013) characteristic of secure

attachment. A musical performance vis-à-vis the audience has its analogue in the parent-child interchange in which parents take pleasure in the quotidian achievements of their children – first steps, nascent language, stick-like drawings etc. If the delight inherent in this process has been suboptimal in childhood, performance may be freighted with the desire to please and to be applauded beyond the parameters of the task itself, and anxiety about this may manifest as MPA. In secondary or pathological narcissism – often a feature of disorganised attachment – the child, in the absence of appropriate mentalized, pride-ful attention, may resort to excessive self-evaluation. For musicians, this constellation can underpin MPA (and maladaptive perfectionism), since beneath secondary narcissism typically lurk feelings of emptiness – an existential void that threatens to overwhelm when things go ‘wrong’ – as in a flawed performance (Kenny, 2011).

Another component in the evolution of MPA that emerged from our previous research with gifted adolescent musicians is the experience of a catastrophic performance breakdown, during which the young musician felt ridiculed and humiliated. Associated with these ‘sensitizing experiences’ (see Osborne & Kenny, 2008), there is often a history of attachment trauma, anxiety in the family, and generational transmission of anxiety from parents, which renders such individuals vulnerable to the development of anxiety disorders. Many adolescents experience shame over perceived or actual failures, but most would not carry the traumatic memory with them through life. It is highly probable that those who do retain these traumatic memories did not have an empathic attuned adult who could assist the young person to metabolize and neutralize these disturbing affects (Kenny, 2011).

Behavioural inhibition is an additional risk factor (i.e., a form of psychological vulnerability) for the incidence, severity and longevity of anxiety disorders in later life (Biederman et al., 1993). Behavioural inhibition refers to a temperament characterized by a tendency to be shy, timid, and constrained in novel situations, that is, unwilling to take risks or to explore the unfamiliar. Behavioural inhibition that persists beyond infancy into childhood confers a higher risk of developing anxiety disorders. Longitudinal studies show that inhibited temperament predicts later diagnosis of social anxiety in adolescents (Schwartz, Snidman, & Kagan, 1999). Parents of behaviourally inhibited children have higher rates of anxiety disorder (Hirshfeld et al., 1992). Attachment security moderates the relationship between behavioural inhibition and stress reactivity measured by circulating cortisol in toddlers. Unlike insecurely attached inhibited toddlers, inhibited toddlers with secure attachments to their mothers did not react with increased circulating cortisol to novel situations (Nachmias, Gunnar, Mangelsdorf, Parritz, & Buss, 1996).

Because there is so little literature to guide our theorizing on the relationship between attachment quality and MPA, the approach was exploratory, guided by five research questions: (1) How do musicians remember their early lives and relationships? (2) How do musicians remember their early musical experiences? (3) How do

these early memories and experiences affect musicians’ current attitudes to and perceptions of their musical performance? (4) What inferences can be drawn about the quality of musicians’ attachment styles, both the quality of their attachment to early primary caregivers and their current adult state of mind with respect to attachment? (5) What is the association between early relational trauma and their experience of MPA?

Method

We used a descriptive qualitative study design based on phenomenologically-oriented, open-ended, in-depth interviews (Wertz, 2005) to explore musicians’ understanding of their early life experiences, both musical and relational, and how these affected their experiences and perceptions of their current musical lives.

Participants

The sample comprised 10 professional orchestral musicians who volunteered to participate in an in-depth interview study “to explore their early and current life and musical experiences”. They were drawn from the eight premier state orchestras in Australia. This study was part of a larger research project that investigated the physical and mental health of professional orchestral musicians in Australia (see, for example, Ackermann, Kenny, O’Brien, & Driscoll, 2014; Kenny & Ackermann, 2015; Kenny, Driscoll, & Ackermann, 2014).

Ethics approval

The study was approved by the University of Sydney Human Research Ethics Committee. All interviewees signed a consent form to allow their interviews to be audio- or video-recorded and for their de-identified transcripts to be used for research purposes, including journal publication.

Procedure

Notices and information statements were distributed via orchestral liaison officers and orchestra rehearsal notice boards to eligible orchestral musicians, with the first author’s contact details. Those who wished to participate contacted the first author via email or phone. All interviews were conducted by the first author either face-to-face or by audio- or video-conferencing. The interview durations ranged between 90 and 150 minutes. Interviews were fully transcribed and copies of the interview transcripts were sent to the second author, a psychiatrist and psychoanalytically trained psychotherapist. Both first and second authors independently annotated the transcripts for themes and content, as well as for the presence of exemplars of the theoretical constructs under investigation (e.g., parental attunement, quality of attachment experience in early life; current state of mind with respect to attachment; presence of internal secure base; behavioural inhibition, sense of self) for each of the participants. Despite differing geographical and professional backgrounds, there was surprisingly close agreement between the two reviewers

with respect to their conclusions regarding musicians' attachment experiences and adult state of mind with respect to attachment; differences were resolved by discussion and consensus.

Interview format

The interview used a qualitative life story method that supported a holistic, contextualized, chronological recounting of participants' life experiences that resulted in a coherent narrative. The method is akin to intake assessment and history-taking in psychotherapy. There are several empirical precedents for the usefulness of narrative data in studies that explore the role of psychological factors in health outcomes (see, for example, Cousineau & Shedler, 2006; Danner, Snowdon, & Friesen, 2001; Peterson, Seligman, & Vaillant, 1988). Further, this approach avoids the constraints of closed questions and self-report measures and the possible bias that emerges from open questions specifically related to the topic of interest. Some researchers argue that "...indirect methods to assess psychological growth, such as open-ended personal accounts of trauma, can allow...reports to emerge freely by eliciting the individual's memory of the trauma, as it is organized subjectively" (Dekel, Hankin, Pratt, Hackler, & Lanman, 2015, p. 2). We chose a narrative rather than a psychometric approach (using, for example, the Adult Attachment Interview), firstly, in order to allow the critical concepts to emerge spontaneously, in the manner akin to grounded theory, rather than introducing theoretical preconceptions inherent in formal psychological testing. Second, we were interested in the relationship between psychological constructs that had not previously been examined together – psychological vulnerability (e.g., behavioural inhibition), attachment trauma, sensitizing experiences in music performance, and music performance anxiety. The effective use of narrative transcripts to identify attachment quality has been reported previously (e.g., Schimmenti et al., 2014).

The in-depth nature of the interviews provided detailed phenomenology of MPA as it arises in the life course. Critics of the use of stories or narratives and case histories as "evidence" in psychotherapy argue that the case history genre is fiction because it involves unconscious and preconscious narrative smoothing on the part of the teller (patient) and listener (therapist). What is recorded in the interview/session may be biased in the direction of the theoretical frame under which the narrator/therapist operates (Smith, R. Harré, & van Langenhove, 1995). These are not insurmountable hurdles, as there are safeguards against such biases. In this study these included: recording and verbatim transcription so that there was a complete record of the interview, two independent assessors of the narratives, and the free development of case formulations from different perspectives.

We commenced every interview with a musical question to establish rapport and interest prior to tackling wider issues. "Can you tell me about your musical life, from the time you started to learn music?" Please speak freely about any thoughts or feelings that arise." Thereafter,

the majority of interviewer interchanges arose organically from the interview discourse and dialogue, so, typically for exploratory qualitative research, varying comments and questions were applied with different musician participants. Textual and thematic analyses of these phenomenologically-oriented life history narratives were undertaken based on the text and the commentaries of the two clinician assessors.

Analysis

The narrative texts were explored to identify themes related to the subheadings contained in Table 1. Following this process, each author independently coded the transcript as showing either secure or insecure attachment – that is, the presence of (unresolved) attachment trauma. There was complete consensus between the coders regarding the quality of attachment displayed in the narratives of the 10 musicians.

Results

Four of the 10 musicians reported lifelong MPA of considerable severity. Five musicians had previously suffered significant MPA but had either recovered or learnt to manage it satisfactorily. One musician reported never having experienced MPA during her musical career. Eight of the 10 reported that they had not experienced parental attunement (i.e., secure attachment) during their formative years. Walter was the only musician who clearly stated that he had experienced parental empathy and attunement. We could not determine parental attunement for one musician – Jenna. Nine of the 10 musicians had not developed an internal secure base (again, Jenna's interview was not clear). Behavioural inhibition (psychological vulnerability) was identified in seven of the musicians. Seven musicians reported sensitizing experiences during adolescence; six reported a similar experience as adult musicians. Table 1 provides a summary of the key issues in the life stories of each of these musicians. We selected five musicians to explore in detail, two each from those suffering lifelong or limited MPA and the one musician, Leila, who had never experienced MPA.

(i) Lifelong MPA

There were four key themes in the life histories of musicians who had experienced lifelong music performance anxiety – (i) psychological vulnerability/behavioural inhibition; (ii) early attachment trauma; (iii) a humiliating sensitizing experience during adolescence related to music performance; and (iv) impaired enjoyment of the process of music-making, especially in the context of performance. We observed a strong relationship between attachment trauma and the failure to develop a reliable internal secure base, which resulted in a lack of self-confidence and an impaired sense of self as adults. Richard is an example.

Richard

Richard has spent 33 of his 56 years as a timpanist in an orchestra. He was the neglected sibling of an

Table 1. Assessment of psychological vulnerability, parental attainment, development of a secure base, sensitizing experiences, current musical experience, attachment trauma, and current experience of music performance

Name	Psychological vulnerability (PV) (behavioural inhibition) and/or sensitizing experience (SE)	Parental attainment	Attachment—internal secure base?	Current musical experience	Attachment trauma and experiences with music performance
Anna 47 years Violin Lifelong MPA	Yes (PV) Always anxious; too affected by “nerves” to play solo; panic attacks; cannot perform without beta blockers and valium. “Two of my sisters also have the same problems as me – anxiety, depression, panic...” Yes (SE) “I won some really big competitions as an adolescent and after that ...I fell apart; I started having panic attacks all the time. It was too much for me to cope with.”	No “My parents, who are also professional musicians, didn’t understand it [severe MPA] at all, because they’ve never had anything like that and they can’t see what the problem is. They would say, “If you’re a good violinist, then there shouldn’t be any problem, so pull yourself together.”	No Enmeshed family – all six members – parents and four children – are violinists who “didn’t get any choice”; children were pressured into international competitions at young ages; Anna was depressed and suicidal as a teenager. “I cannot imagine a worse mother.”	“At work I am often unable to continue playing because my heart races so much, I can’t think.”	“It’s been a lifelong struggle for me... I couldn’t have been a musician without the pharmaceutical industry.” “I’ve often felt suicidal, to do with music... especially around competitions and auditions which are just too much for me to cope with.” “I want my life to be over.”
Greg 49 years Percussion Lifelong MPA	Yes (PV) Described symptoms of social anxiety disorder as well as severe MPA. Yes (SE) Had a profound sensitizing experience at age 12, when he discovered that “other students were as good as me; that permanently upset my self-confidence... I started to feel like a sham from primary school onwards. That feeling has never left me.”	No “Dad is a jazz pianist but he is highly strung, very nervous, paranoid, never stuck at anything. I worried that I would end up like him.” Mother not mentioned in the interview.	No “I didn’t get practical or emotional support from my parents.” He also received little support from his wife: “My wife is aware of it [MPA] but we don’t talk about it. Sometimes she gets mad at me and says, “Don’t be silly.”	“Deep down I’ve got a lack of self-esteem... I am a good musician but I can’t make myself believe it.” “Nervousness... ruins my ability to concentrate and ... paralyzes my mind to deal with the problem at the time.” “I am completely ruined by this monster and I don’t know what to do.” Had a devastating experience of being ridiculed by a conductor, from which he has never recovered. “It’s bad enough having this monster on my back of my own making without somebody like that making it worse.”	“Music is my life; I don’t do anything else.” “Being nervous about what I do has almost completely ruined my enjoyment of music. It’s a monster so big... I just can’t fight it... it’s bigger than me. I have lived with it for 30 years... when I botch a performance, the shame is immeasurable.” “I fear that other musicians will see me for the sham that I am.”

Table 1 cont.

Name	Psychological vulnerability (PV) (behavioural inhibition) and/or sensitizing experience (SE)	Parental attunement	Attachment—internal secure base?	Current musical experience	Attachment trauma and experiences with music performance
Richard 56 years Timpani Lifelong MPA	Yes (PV) Shy, social anxiety, started musical career late (18). Yes (SE) MPA from outset – “I panic, and hyperventilate and feel paralysed”; shows maladaptive perfectionism.	No Mentally ill mother; changeable unreliable, and unavailable; gives up easily; Richard always “in the shadow” of a gifted older brother and a blind sister. Mother overwhelmed with grief.	No Grew up “in the shadows”; became rebellious and left home at 17 to escape the shadow; little contact with family over the course of his adult life.	Anxious his whole life; intensity of MPA has not changed over 30 years. He was in a “living hell” with a conductor who disliked him. He “felt shell-shocked” and “never forgot that experience”.	A bad performance leaves him with a “sense of disappointment, of despair”; “Outside forces sabotage any chance of achieving perfection”.
Matthew 40 years Oboe Lifelong MPA	Yes (PV) Describes himself as introverted and “nervy.” “I felt lacking in self-confidence in childhood.” Yes (SE) Had highly sensitizing experiences of MPA at 12 and 20 years of age. Panic experienced as a “shock” – that memory “has always stayed with me. I felt ashamed, wanted to run away, had a memory lapse and just froze.” This experience was repeated in his 20s when a maestro humiliated him in a master class.	No Mother suffered panic attacks. She was aware that he was suffering but “left me to my own devices to manage it.” “She would come to some of my concerts, but never had any words of support or comfort for me.”	No Mother was only intermittently available, so Matthew’s anxiety levels needed to be high in order to activate her care-giving.	“I’ve had lots of worse experiences than that one at 12, but that was the first one that I remember and it is with me always.” “I have panic attacks all the time now. I have been taking Inderal (a beta blocker) regularly for the past 25 years to stop the panic slamming into me; otherwise, I wouldn’t be doing the job.”	“Techniques don’t work for me because panic comes on so quickly and absolutely overtakes me... I find the panic so debilitating when it does come up on me, that I just can’t do anything, I still feel really, absolutely, without any control at all.” “Humiliation is a quite a common experience in this business.” “Shame is one the strongest feelings I have about performing.”
Rebecca 33 years Violin MPA, but manages satisfactorily	No (PV) but described ambivalence about exposure – formulated as wanting to sit up front to have the gaze of the missing mother but feared failure and loss of the gaze. No (SE)	No Scientist father and brother have Asperger’s Syndrome, both brilliant but social misfits; from a family of scientists and doctors, so never felt part of the crowd (family). Mother had panic attacks and depression, attributed to lack of emotionally attuned partner in life. Rebecca became a parentified child.	No I get incredibly frustrated with my father; I’ve learnt not to argue with him because I get so worked up, and we’ve had some massive family fights... Mum is fiercely loyal to Dad even though he drives her bonkers. Mum has a touch of Asperger’s also – cross her and she writes you off completely.	Has found her niche in a national chamber music group	Found playing in a large orchestra “sterile”, “like being in a straight-jacket” and “terrifying”, can’t connect with self or the music. Rebecca feels that if she’s not noticed she doesn’t exist. Being part of a crowd i.e., family/orchestra is “terrifying.”

Table 1 cont.

Name	Psychological vulnerability (PV) (behavioural inhibition) and/or sensitizing experience (SE)	Parental attunement	Attachment—internal secure base?	Current musical experience	Attachment trauma and experiences with music performance
Rebecca					
Walter 39 years Viola MPA, but manages satisfactorily	<i>No (PV)</i> <i>Yes (SE)</i> Had a significant sensitizing experience during adolescence. Played for 'fun' until selected into a music school, where he felt "like the dunce in the class" because he was not as advanced as the other students.	<i>Yes</i> Described an attuned mother who discerned when he was distressed. Parents were supportive and accepting of Walter's choices. Did not set unrealistically high achievement expectations allowing Walter to develop intrinsic motivation.	<i>Yes</i> My parents were very supportive of everything that we undertook...My brother is an Olympic gold medalist. [They] were quite happy to drive us to music lessons etc... Secure attachment enables Walter to benefit from help e.g., When stressed, he "... actively seeks out advice from teachers..."	"That feeling of sitting in the corner with a dunce's hat on has stayed with me all these years. I get the feeling again if I am under-prepared for a performance."	"Sibling rivalry" continues to be a feature of his musical experience, particularly in relation to desk partners in the orchestra. However, he is generally able to balance human fallibility and striving to play flawlessly, despite residual evidence of a "harsh superego".
Lucas 27 years Violin MPA, but manages satisfactorily	<i>No (PV)</i> <i>Yes (SE)</i> Had a significant sensitizing experience during adolescence. Memory lapses were the "big grim reapers" of performance. Lapses were associated with feelings of shame and humiliation.	<i>No</i> "My parents are both professional musicians who struggle with MPA and who use beta blockers." "When you're little, you think your parents are completely infallible and pillars of strength, but we saw them really struggling."	<i>No</i> Due to his parents' severe MPA, they could not be emotionally available or responsive to the emotional needs of their children; hence, the need for compensatory manoeuvres like playing it safe.	"In my student years, I found performance anxiety a much bigger problem than I do now... On the night of a concert, I got out of my receded self-obsessed state and try to relax and communicate with the audience... I no longer play from memory."	To cope with parents who could not contain their own anxiety, and therefore were unable to help their son, Lucas foreclosed his career and played it safe. He "never aspired to be a solo artist... maybe I should have been less realistic" – and he has given up playing from memory.
Jenna 57 years Harp MPA, but manages satisfactorily	<i>Yes (PV)</i> "I'm a very shy person so for me performing wasn't easy... You see the outgoing people, the natural performers, once they get on stage they take over the world; it was never natural for me... even as a young person, I was very scared when I played."	<i>Don't know</i> No clear evidence, but... "My family thought I was having a ball performing on stage and it was a dream. They didn't know how tied up in knots I really was."	<i>Don't know</i> No clear evidence, but... "My father died suddenly soon after I was married and that was shocking as I did not even know that he was sick." [This suggests emotional distance from parents].	"When I was young, I said, "I'm a harpist." After 20 years, "No, I'm not a harpist, I'm a musician who plays the harp" but now, that's not who I am, I'm actually a person. My job no longer defines me..."	"It's what your mind does with any situation that matters... I'm still an extreme worrier. I get tied up in knots, because I'm on my own now and I'm just beginning to resent that... I've still got lots of problems but I'm using music as a haven from all of that so

Table 1 cont.

Name	Psychological vulnerability (PV) (behavioural inhibition) and/or sensitizing experience (SE)	Parental attunement	Attachment—internal secure base?	Current musical experience	Attachment trauma and experiences with music performance
Jenna	Yes (SE) “I used to sit and tremble, my hands would shake because the conductor’s looking at me.”	“My daughter had severe anxiety problems but she hid it – it only came out when she had a breakdown.” Lack of emotional connectedness?	“My husband was a manic-depressive and an alcoholic... he took his life...” “I’m fed up with not having someone to talk things through with...”	I am a human being and this allows me to make mistakes and be creative... “I saw people being destroyed... by a conductor because he’d pick on them, never compliment them, they shrivelled up inside and couldn’t play; they had to walk away from their careers.”	that it’s not the problem that it was. Life came along and said, ‘Hello, there’s a lot more important things than whether you make a few mistakes or not’.”
Wendell 45 years Violin MPA, but manages satisfactorily	Yes (PI) Struggled socially. “Maybe there is a stigma that I am carrying. I want to be accepted; I feel that I have never been socially accepted – that’s probably some childish hangover... (a form of social anxiety?)” No (SE) No specific SE reported	No “My parents were not interested in my school work ever or what I was doing. I didn’t feel they were interested in anything that I did and I felt alienated from them.” “They were distant and aloof... There was no effort for emotional connection. I had moments of anguish as a teenager because they weren’t interested in me... I grew up understanding that my parents never wanted to see me play and they never did.”	No Avoidant/dismissing/de-activating attachment with parents but earned security through compensatory attachments (God, teacher and music colleagues). “By the time I was in tertiary level I didn’t need parental input. I had a great teacher, and I was in a string quartet... that lasted for three years... that really fed me emotionally with self-respect and gave me a lot of confidence.”	“My Christian faith has given me perspective about the importance of what I do. It helps to separate self-respect from conceit.” However, “Even now, I’m certainly not beyond feeling humiliated.”	“There is a certain self-respect that I now have for me as a player... I feel confident about what I’m doing and maybe it stems from the fact that I had to be in order to feel okay about my own playing because my parents weren’t there to tell me it was good or going well.”

Table 1 cont.

Name	Psychological vulnerability (PV) (behavioural inhibition) and/or sensitizing experience (SE)	Parental attunement	Attachment—internal secure base?	Current musical experience	Attachment trauma and experiences with music performance
Leila 45 years Bassoon Never experienced MPA	Yes (PV) Lonely, isolated, struggled with sexuality; father had panic attacks. There was no “parental gaze”. No (SE) “I settled on the bassoon because I wanted to do something that would make me stand out...”	No “There was no pressure from my parents – I was free to do whatever I wanted, but they were not sensitive to my intellectual and emotional needs. My mother was disengaged and was off having affairs; dad was anxious, all over the place emotionally – he had panic attacks. My parents didn’t notice that I was alone, not doing things with friends.”	No However, music became akin to “earned security” – “Playing the bassoon is like breathing... Loneliness made being a musician attractive... in my teens and 20s I socialised with other musicians as my main friends...”	“I have never had MPA. Even when I have been anxious, I know I can still play well... I love playing solos; I’m such a show off... I have an extreme determination to play musically and beautifully no matter what.”	Music helped me to have an identity... [but] it was intensely important to be the absolute best... If I messed up, if I wasn’t successful as a bassoonist, I would be in trouble.”

academically gifted older brother, and a sister who was born blind. Their mother suffered from clinical depression and was frequently hospitalized. His father was not mentioned in his narrative.

My parents never delighted in my achievements. I was always in the shadow of my older brother. He was two years older than me and he was smart, motivated, conformist, always did well. I could never measure up. I was rebellious. I left home at 17 years to escape the shadow, but there is always a shadow hanging over me.

His mother was overwhelmed with grief and the burden of caring for a disabled child, but also appeared dispositionally anxious, depressed and fragile.

I have a sister who is blind so my mother had anxieties that go with that. She is a very nervous person. She gets flustered very easily and gives up if she doesn't get things right the first time. She had a bad mental breakdown when we were young and spent time in a mental hospital... I am not close to my family ...I only see them once every four years or so... I have always been a shy person, and anxiety has affected me in other areas of my life, especially in musical performance and public speaking.

Richard's perception was that his mother had no energy for him; he was left to fend for himself, (Wendell reported a similar experience) culminating in his early exit from home at 17 years. It is likely that there was some generational transmission of anxiety from his mother together with a possible biological vulnerability to anxiety (shyness); several other members of his family also suffer anxiety, including his 19-year-old daughter. He describes his experience with MPA thus:

I have suffered from MPA my whole professional life. The anxiety for performance has stayed the same over the course of my long career as a professional musician. I sometimes feel paralysed; I hyperventilate, I have a feeling of intense nervousness and tightening in my body; my technique is not relaxed. I am always anxious that the stick will fly out of my hand. It has flown out of my hand on occasion, and those are moments of intense panic...I have never played without MPA...it does not decrease when I have easier repertoire to play, because it still depends on a lot of other elements, such as whether the concert is low key or a very serious major concert with an international conductor. I always try to make sure that I am well prepared technically. Then, when I go on stage, I meditate and breathe deeply to help with my MPA. Most of the time, I still can't enjoy the performance. My strategies allow me to remain professional and get the job done... I am a professional musician. I know how to give a professional performance. I would like it to be an enjoyable experience but MPA prevents this.

His oppressively fatalistic account reveals a man who has been disappointed by life. A bad performance leaves him with a "sense of disappointment, of despair"; "Outside forces sabotage any chance of achieving perfection".

Music is the same as anything in life. I was passionate about it at the start but it is hard to retain the passion. It becomes a job, but I am grateful that I still have my health

and my technique. Often, when the music is not uplifting or inspiring, I just go through the motions; Music is not a glamorous profession...

There is no joy in his life – a feeling that mirrors his early experiences with his parents, who "never delighted in his achievements."

Matthew

Matthew is an oboist and part-time conductor, now in his 40s, whose MPA began in early adolescence when he 'froze' (i.e., experienced a catastrophic breakdown in performance) during a solo performance in a school concert. The feelings from this early experience of panic, humiliation and shame were later reinforced when attending a master-class during his tertiary studies, at which time his playing and a memory-lapse were ridiculed (as he experienced it) by the maestro. Undeterred, he has made a successful career in music, partly by working as a conductor in which role he is MPA-free, and partly with the help of Inderal (a beta blocker) during stressful performances. Nevertheless, the MPA remains as a lurking threat in his life:

There is within this thing that hits me...I find it so debilitating when it does come up on me, that I just can't do anything, I still feel absolutely without any control at all. I'd love to wake up tomorrow and think I'm never going to suffer from performance anxiety ever again...but ...I enjoy performing so much, it's a very strange conundrum.

For Matthew, MPA is problematic but not crippling. He spoke of his anxiety-ridden mother with whom he felt unable to share his own feelings of panic:

My mother's very much prone to panic attacks and my two nephews suffer very badly from panic attacks too. So I find it almost like a genetic thing to a certain extent.

Matthew described his attachment to the orchestra itself and the sense of belonging that it provided.

Umm, sometimes, it's a bit of a funny job the orchestra, because we're like one big family in a way, it's a bit like a sports team...Last year I had an offer of a music teaching job in a school which paid twice as much as my job in the orchestra. ...I think I would miss the job so much, the performance side of it and the enjoyment of working with great musicians; I would miss that a lot.

However, his MPA is constantly triggered in the orchestral context since he is acutely aware of how he compares with other members of the orchestra. This led to an exploration of sibling feelings:

They [his brothers] don't work in a situation where panic or anxiety affects them. I always remember doing a driving test years and years ago. It was a crash driving course... we did a whole week staying in a motel and we had to do the test at the end of it. I remember noticing how everyone on the course with me got completely chewed up with nerves at test time, and I'm thinking, "Oh well, this is what I go through every week" [laughs].

(ii) MPA resolved or managed satisfactorily

There are many permutations and pathways in one's life experience that can repair early attachment trauma. One of the most frequently encountered is the development of reparative or compensatory attachments. The other is to foreclose on one's aspirations and 'play it safe', thereby avoiding dangerous, triggering scenarios. We present two vignettes, each representing one of these 'solutions' to early problematic attachment experiences.

Compensatory attachment

The quality of attachment is determined not only by the quality of parenting, but to the availability of resources, both material and personal, such as intelligence, talent, or temperamental flexibility that help people moderate their affective states, and by the presence and quality of compensatory attachment relationships that provide an opportunity to develop 'earned security' (Roisman et al., 2002). All of these factors together form the basis for the development of the individual's coping repertoire (Kenny, 2013). Wendell is an example.

Wendell

Wendell is a violinist from a large (seven children), musical family; he has two siblings in the string section of the same orchestra. He describes himself as unambitious and seemingly rather disconnected and aimless in his personal life. His mother taught him the violin, but, in his perception, there his parents' interest in him and his siblings ended. He describes parents who were emotionally cut-off, lacking in empathy, and disinterested in their children. He felt alienated from them and anguished by their lack of acknowledgement.

They tended to read and sit in a chair and smoke. They left us all to our own devices. I tried a couple of times to express this anguish to them but I didn't get a result because they couldn't communicate on that level.

As an adult, Wendell reflected on the impact of his past on his current self-perception and coping strategies, and discusses the compensatory attachments that he found in his teacher and peers.

I had an emotionally isolated childhood, but there is a certain self-respect that I now have for me as a player. I feel confident about what I'm doing and maybe it stems from the fact that I had to be in order to feel okay about my own playing because my parents weren't there to tell me it was good or going well. By the time I was in tertiary level I didn't need parental input. I had a great teacher, and I was in a string quartet when I was a student that lasted for three years and we were really trying to be successful. I think that that really fed me emotionally with self-respect. That gave me a lot of confidence that was a valuable thing for me.

As a teenager he 'found' religion, and it seems that this, in addition to the self-reliance mentioned above, has given Wendell the emotional support lacking in his childhood. An interesting comment implies the *modulating* effect of the holding Other, in this case God, in which the

inevitable narcissism associated with musical talent is transmuted into healthy self-esteem:

You know, trying to separate self-respect from conceit. I think my faith has helped me with that.

Wendell exemplifies the importance of the teacher as a key psychological as well as purely musical figure in the development of a musician, and how this quasi-parental relationship can, to an extent, compensate for what was lacking in childhood. Fostered in this way, musical talent is an inherently resilience-promoting factor. In Wendell's case this has also been helped by his religious faith which provided the validation which he lacked in childhood.

The barrenness of his inner life may have meant that he craved praise and applause from his teachers, peers and audience, and their attention was compensatory, but his suppressed rage about his perceived lack of parental involvement left him with a feeling of inner emptiness. His existential disconnection in his life is evident. Wendell illustrates well the efficacy of the avoidant defence – he can keep MPA at bay so long as he does not push himself forward; but avoidance entails psychic work in keeping negative affect at bay. He cannot plan ahead or think about what he wants to do with his life – all his efforts are directed into keeping his psychic ship afloat.

Career is not something that's ever really concerned me, as you can probably tell from my sketching my childhood. I never really had much ambition... I'm not somebody who had a vision. I can't understand why.

'Playing it safe'

For some people, the experience of persistent anxiety and self-doubt become so intolerable that they resolve the emotional crisis by foreclosing on their adolescent dreams and goals and 'play it safe'. This is what Lucas did.

Lucas

Lucas is a 27-year-old violinist who has played in the orchestra for four years. Lucas appeared to start out with a normal amount of youthful self-confidence and healthy narcissism. He said that he felt

...very lucky getting this job so soon after graduating. A lot of people want a job in an orchestra and most have to try a lot longer than 8 or 10 months to find one.

However, his early life and attachment experiences did not allow him to sustain this. He describes an enmeshed family in which individuation, separation and assertiveness were not encouraged.

My parents are both professional musicians. I come from a family of five kids and we all play music, four of us professionally, so it's something I was bred into. I was playing the violin before I even knew what was happening...

He pinpoints the cause of his early MPA to insecure memory.

One thing that used to make me very nervous was when I was playing solos in competitions which were always from memory...one of the hardest things, which made me feel tense and worry about performing. It was the big grim reaper of a memory slip or a memory lapse hanging over me that I associate with performance anxiety. It happened all through school and university studies – memory lapses and falling into a heap...eventually, I expected to flounder...

Lucas experienced catastrophic reactions to his memory lapses and developed a sense of defeat and fatalism. These feelings were reinforced as he watched his own musician parents cope with debilitating music performance anxiety.

My dad is a professional horn player who really struggles with performance anxiety; he has to use beta blockers. My mum is also a musician and she uses them too. Dad has severe problems with confidence ... When you're little, you think your parents are completely infallible and pillars of strength, but we saw them really struggling. We knew they were nervous and took beta blockers.

Lucas's parents disappointed him – he had to become prematurely “adult” in his approach to his own anxiety because there was no secure internalized parental base to assist him. As he says:

*Maybe that helped me think logically about performance anxiety and what effects it has.... I never play from memory now. I never aspired to be a solo artist... **maybe I should have been less realistic**, [our emphasis] but my parents wanted me to have a steady job in an orchestra and not go overseas for more lessons like a lot of my friends were doing and aspiring to a solo career.*

He has solved his performance anxiety by never playing from memory – this forecloses opportunities for solo performances. This is a sad statement from a man who is still young but who has excluded himself from the bolder possibilities and aspirations of his life. He has introjected his parent's anxiety about security and fear of performance by ‘playing it safe’ i.e., remaining an orchestral musician and not trying to overcome his fears of playing from memory, thereby accepting the end of his grandiose childhood fantasies for virtuosity, adoration and recognition that was perhaps denied him in his relationship with his parents.

(iii) No experience of MPA

Only one of the self-volunteering musicians reported never having experienced MPA. This case is illustrative in illuminating the fact that although one can be free of performance anxiety, this does not necessarily suggest secure attachment or represent psychological well-being. Leila is a 45-year-old bassoon player. Her narrative is replete with attachment trauma, yet she escaped its expression in her music. Both parents were professional musicians but incompetent (“not sensitive” or attuned) parents. Leila was very gifted and learnt several instruments in rapid succession. On her choice of instrument, Leila said

I settled on the bassoon because I wanted to do something that would make me stand out, was challenging and

weird. I discovered at 14 that I was gay. I felt different so finding an identity as an unusual musician is related to that. ...I got a lot of self-esteem from being really good at music... because I was a super lonely kid. I felt that there was something wrong with me and it was my lot in life to be on my own. Loneliness made being a musician attractive... Music made me feel special...

Leila achieved a very high level of mastery on many instruments with comparative ease

...but it was intensely important to be the absolute best. ...I've been in some very competitive musical environments, but I have never had MPA...

Leila's account of her early life certainly suggests attachment trauma, yet she was protected against the experience of severe MPA. Why? We surmise that Leila's facility with her instrument (“playing the bassoon is like breathing”) has played a significant role in protecting her from MPA. She, like Jenna, continues to experience emotional distress in her everyday life and sees music as a sanctuary or haven into which she can retreat when interpersonal relationships become too difficult.

... I dread working with conductors who are overt bullies and male musicians who are covert bullies. I like playing the bassoon but I don't like going to work – I have nightmares about getting hassled. I ruminate about how I can deal with it.

Leila personifies a key paradox in the gifted: musical (or any other) skill enhances self-esteem, but if self-esteem is excessively bound up with being a ‘good’ performer it becomes persecutory (i.e., to play badly is to perceive oneself as a ‘bad’ person or as a failure). Leila understands the fragility of her position – she says that “...if I messed up, if I wasn't successful as a bassoonist, I would have been in trouble”.

Discussion

In this paper, we argued that an attachment approach shines a light on some of the major themes intrinsic to MPA once the latter is viewed from a developmental rather than purely symptomatic perspective, particularly when we attempt to understand the symptoms of MPA in a relational context. This interplay between developmental relational history and MPA emerges in a common ‘interdisciplinary’ language of attunement and ‘being on the same wavelength’; ‘being heard’; the importance of ‘holding’ if the emotional exploration that lies at the heart of music training and performance is to be facilitated; sibling rivalry and dissonance versus sibling harmony and co-operation; being seen and applauded (i.e., healthy and sometimes pathological narcissism, both for parents of musicians and musicians themselves); and the psychosomatic self in the sense that music performance, no less than relationship, involves body, mind and emotions. An attachment-informed psychodynamic approach to MPA explores these themes, while attempting to provide the attention, reliability,

validation and a realistic non-judgemental stance that may have been missing in childhood.

Our proposed model suggests that the emergence of severe, lifelong MPA may depend on two sequential factors: a) suboptimal developmental experience and relational disturbance in infancy and early childhood and b) sensitising events and experiences in adolescence that reinforce and strengthen pre-existing pathways to anxiety and self-doubt. Our study found that symptoms typically surface during adolescence in talented youngsters who have often previously performed without undue anxiety. In the formulation that has guided our understanding of these interviews we see adolescence as a phase in which the attachment system is re-worked in a number of significant ways. First, overt dependence on parents is replaced with an 'internal secure base' to which the individual can turn as a source of safety and reassurance when under threat, and which acts as a port of first call for affect-regulation. Second, the peer-group begins to assume the role previously occupied by parents as a significant haven for truth-telling, trust and mutual learning. Third, mentalization skills, especially the capacity to understand, regulate, and verbalize one's thoughts and feelings, and, comparably, to read those of others begins to mature; this process can be compromised in the MPA sufferer-to-be. Finally, identity and life-course options open up; advice, role-modelling and learning is often invested in 'older and wiser' non-parental mentors, and here pre-existing assumptions based on early childhood constellations colour the teacher-pupil relationship, for good or ill. These changes are negotiated at different rates and with varying degrees of completion by young adults, usually in the decade age 15–25.

The capacity to successfully negotiate these developmental phases will depend to a large extent on earlier attachment experiences with caregivers, and that, for musicians, insecure attachment will shape the way in which performance anxiety is experienced and managed, or result in lifelong MPA. An internal insecure base arises from early developmental experiences that have been affect-dismissing (avoidant), inconsistent (preoccupied), or persecutory, neglectful or chaotic (disorganised/unresolved). This means that musicians may find it hard to trust themselves and their audiences to the extent that they perceive their prototypical 'listener' as affectless, inattentive, or misattuned (as in the case of Wendell and Richard). This in turn can lead to inappropriate preoccupation with technical perfection and excessive self-consciousness. In the same vein, the peer group – fellow musicians in an orchestra or band – rather than being a source of support, feel persecutory, with the danger of ridicule or expulsion fuelling MPA symptoms. Maestros and conductors, as musical quasi-parents, are often perceived in this way (see Matthew's account of his experience in a master class and Greg's, Richard's, and Jenna's descriptions of conductors). Teachers, similarly, rather than being trusted role-models, become fear-inducing critics. Anxiety inhibits mentalizing, thus creating a vicious circle in which the sufferer is less and less able to look at his or her fears of failure and view them as 'just thoughts' rather than a putative reality.

We were struck by the extent to which persecutory self-monitoring was prominent in several accounts. Self-monitoring is an essential part of any skill – observing oneself, learning from and correcting mistakes, keeping oneself safe. For the securely attached, mistakes and misattunements are normal and necessary, fostering the skills of reparation and repair. For several of the musicians in this study, however – e.g. Anna, who felt "*suicidal in relation to music*"; Greg, who felt "*immeasurable shame*" when he "*botched a performance*"; Richard, for whom a bad performance leaves him with "*a sense of disappointment and despair... striv[ing] for perfection. I am disappointed if I don't achieve it*"; Matthew, who feels the "*panic slamming into me*" when under perceived threat; Walter, who has the "*feeling of sitting in the corner with a dunce's hat on*" if he makes a mistake; Lucas, for whom memory lapses were "*big grim reapers*"; and Leila, for whom it was "*intensely important to be the best*" – errors were a signal that to be less than perfect would lead inexorably to depression-enhancing self-recriminations. For those with internal working models associated with attachment insecurity, this process may activate a critical or rejecting parent (e.g., Richard commented that conductors trigger depression in him), or a transgressing or disorganised child dynamic (e.g., feeling like a dunce sitting in a corner; feeling like a sham, a fraud, or a failure).

Underlying this persecutory self-monitoring is the experience of shame. This was observed in both the sensitizing experiences during adolescence and the current experiences related to MPA. Allan Schore (1998) has suggested that attachment trauma in the form of maternal misattunement sensitizes children to shame experiences, which may be manifested in several ways, of which self-denigration, ruminations about one's defects, and the internalization of a shaming object threatening the self with rejection are common (Schimmenti, 2012). These experiences create chronic difficulties in self-esteem (positive affect) regulation because the early shaming experiences become prototypical of all interactions (Schore, 2003). Thus, attachment disorders underlie all early developing psychopathologies, which manifest as failures of self and/or other interactional regulation. This is hypothesized to be the underlying cause of the panic and depression that characterizes severe MPA.

Nevertheless, in our sample more than half managed their symptoms more or less successfully, either with personal strategies or with the help of beta-blockers and symptomatic psychological therapies such as CBT. Such symptom-oriented approaches have limitations, however. Symptoms may persist, or, while functioning to an extent, the musical (and indeed personal) potential of the afflicted individuals may not be fully realised. Here we noted another pervasive theme in the interviews – that of the need for 'self-holding' (Slochower, 1996). Self-holding is a necessary part of successful performance, but if this is to the exclusion of the audience, it can short-circuit the communicative process, leading to excessive self-awareness, detracting from emotional expressiveness, and

creating a vicious circle of anxiety and further alienation. Ideally, the performer is ‘talking’ to the audience about the music. The performer herself needs to feel ‘held’ in an internal secure base (ISB) to which he/she can turn if anxiety surfaces during difficult passages, making a mistake, or not feeling in sufficient technical control of the material. This ISB, arising out of secure attachment experiences in childhood, is accepting, reassuring, forgiving, recharging, reparative, anxiety-alleviating. This enables the performer to carry on and return to the ‘present moment’ of the music and to the communicative task. Lucas poignantly expressed this idea – “*On the night of a concert, I get out of my receded self-obsessed state and try to relax and communicate with the audience.*”

Our study suggests that a life-course approach may helpfully reveal the developmental origins of MPA, and that the attachment framework can help illuminate the specific themes that arise in a performance. The presence of an ‘internal secure base’, the capacity to trust fellow musicians for support, and to trust that audiences will be attentive and compassionate are the outcomes of secure attachment in childhood. Jenna expressed this well – “*There are times when the orchestra will think as one and it raises everyone up out of themselves and you soar along on this great euphoria.*” When this has been compromised, in the various forms of insecurity, then MPA may result, and the worldview of musicians includes fears that fellow musicians will criticise or ridicule them, or dismiss their anxieties, and that audiences will be inattentive, hostile, and unforgiving.

The attachment themes outlined here do not pertain solely to musicians, but may apply equally to other artists – actors and dancers certainly. Indeed, it could be argued that everyone to a greater or lesser extent, at some time or other, is called upon to ‘perform’ – a presentation in class, a toast at a wedding, or a valedictory address. To use a musical analogy, the attachment themes we have discussed can be seen as underlying ‘leitmotifs’ which recur throughout life. For musicians the extremity of a musical performance provides the context in which they come to the fore. This can be exhilarating or traumatic, or both, but is likely to evoke a person’s repertoire of both creativity and anxiety. Implicit in our approach is the need a) to test our qualitative conceptualisations quantitatively, and b) to explore the efficacy of an attachment-informed psychodynamic approach to the treatment of MPA when medication, CBT and other symptom-focused treatments have failed. One case study has reported the efficacy of this approach (Kenny, Arthey et al., 2014), but further studies are obviously required.

Finally, our findings contribute to the discussion regarding the ‘artistic temperament’ and its association with mental illness (Kaufman, 2005; Ko & Kim, 2008; Ramey & Weisberg, 2004; Thomson & Jaque, 2012). For example, while most artists share a greater capacity for absorption and imagination (Dalenberg & Paulson, 2009), they also display a greater propensity for pathological dissociation, and report higher rates of trauma and loss experiences in their developmental histories. Pathological

dissociation was strongly associated with unresolved attachment as assessed by the Adult Attachment Interview (Thomson & Jaque, 2012). Although none of the previous studies included performing musicians, or assessed the link between trauma, loss, or attachment quality on artistic performance, our work has now identified a connection between attachment insecurities and performance anxieties.

Limitations of this study

There are limitations to this exploratory, qualitative study. The first concerns the researchers themselves. It is possible that the particular theoretical approach was imposed on the interview material and that researchers with differing theoretical biases might have reached different conclusions. We would argue that this danger is inherent in the methodology adopted, but that safeguards, especially the mentalizing perspective which takes account of the researchers’ preconceptions and predispositions towards an attachment-informed psychodynamic approach, are mitigating counter-weights.

Second, although we felt that a narrative, quasi “grounded-theory” approach useful in this exploratory study because our aim was theory-building, subsequent research will supplement the narrative approach with psychometric tests on larger, representative samples of musicians.

Third, although population studies have shown that MPA is common in musicians (see Kenny, 2011; Ackermann, Kenny, O’Brien & Driscoll, 2014; Kenny, Driscoll, & Ackermann, 2014), the findings of this paper should not be taken to imply that it is a near-universal phenomenon. Of the 10 musicians who volunteered to be interviewed, nine had experienced significant issues with MPA. Clearly, those with unresolved issues or continuing emotional distress about their musical lives will have been more motivated to participate in such a study. The current sample was self-selected and their experiences do not represent the whole domain of MPA, nor indeed, the majority of performing musicians. Nevertheless, they have, for the authors at least, undoubtedly deepened our understanding of the origins and dynamics of MPA. We hope they have added to theorizing about the underlying psychological vulnerabilities that musicians carry with them into their adult professional lives, and pointed to ways in which these might be alleviated through appropriate therapeutic interventions.

References

- Ackermann, B.J., Kenny, D.T., O’Brien, I., & Driscoll, T.R. (2014). Sound Practice – improving occupational health and safety for professional orchestral musicians in Australia. *Frontiers in Psychology*, 5, 1–11.
- Ainsworth, M.D. (1963). The development of mother-infant interaction among the Ganda. In: B.M. Foss (Ed.), *Determinants of infant behaviour* (Vol. 2, pp. 67–112). New York: Wiley.
- Ainsworth, M.D., & Bell, S.M. (1970). Attachment, exploration, and separation: Illustrated by the behavior of one-year-olds in a Strange Situation. *Child Development*, 41(1), 49–67. doi: 10.2307/1127388

- Ainsworth, M.D., Blehar, M.C., Waters, E., & Wall, S. (1978). *Patterns of attachment: A psychological study of the strange situation*. Hillsdale, NJ: Lawrence Erlbaum.
- Altman, N. (2003). Affect regulation, mentalization, and the development of the self. *Journal of Child Psychotherapy*, 29(3), 431–435.
- Beebe, B., & Jaffe, J. (2008). Dyadic microanalysis of mother-infant communication informs clinical practice. In: B. Beebe & J. Jaffe (Eds.), *Human development in the twenty-first century: Visionary ideas from systems scientists*. New York: Cambridge University Press.
- Beebe, B., Jaffe, J., & Lachmann, F. (2005). A dyadic systems view of communication. In: J.S. Auerbach, K.N. Levy, & C.E. Schaffer (Eds.), *Relatedness, self-definition and mental representation: Essays in honour of Sidney J. Blatt* (pp. 23–42). New York: Routledge/Taylor & Francis Group.
- Beebe, B., Jaffe, J., Markese, S., Buck, K., Chen, H., Cohen, P., . . . , & Feldstein, S. (2010). The origins of 12-month attachment: A microanalysis of 4-month mother-infant interaction. *Attachment & Human Development*, 12(1–2), 6–141.
- Biederman, J., Rosenbaum, J.F., Bolduc-Murphy, E.A., Faraone, S.V., Chaloff, J., Hirshfeld, D. R., & Kagan, J. (1993). A 3-year follow-up of children with and without behavioral inhibition. *Journal of the American Academy of Child & Adolescent Psychiatry*, 32(4), 814–821. doi: <http://dx.doi.org/10.1097/00004583-199307000-00016>
- Bifulco, A. (2008). Risk and resilience in young Londoners. In: D. Brom, R. Pat-Horenczyk, & J. Ford (Eds.), *Treating traumatised children: risk, resilience and recovery* (pp. 117–130). Hove, U.K.: Routledge.
- Bigelow, A.E., & Walden, L.M. (2009). Infants' response to maternal mirroring in the still face and replay tasks. *Infancy*, 14(5), 526–549.
- Blass, E.M., Lumeng, J., & Patil, N. (2007). Influence of mutual gaze on human infant affect. In: R. Flom (Ed.), *Gaze-following: Its development and significance* (pp. 113–141). Mahwah, NJ: Lawrence Erlbaum Associates.
- Bodin, G. (1996). Inhibiting the mentalizing capacities: A defence against anxiety in the interplay of the object and subject. *Scand. Psychoanal. Rev.*, 19(2), 180–195.
- Bowlby, J. (1940). The influence of early environment in the development of neurosis and neurotic character. *International Journal of Psychoanalysis*, 21, 154–178.
- Bowlby, J. (1960). Grief and mourning in infancy and early childhood. *Psychoanalytic Study of the Child*, 15, 9–52.
- Bowlby, J. (1973). *Attachment and loss: Separation, anxiety and anger* (Vol. 2). London: Hogarth.
- Bowlby, J. (1988). *A secure base: Clinical applications of attachment theory*. London: Routledge.
- Bretherton, I. (1994). Infants' subjective world of relatedness: Moments, feeling shapes, pronarrative envelopes, and internal working models. *Infant Mental Health Journal*, 15(1), 36–41.
- Cassidy, J., & Shaver, P.R. (Eds.). (2008). *Handbook of attachment: Theory, research, and clinical applications* (2 ed.). New York: Guilford Press.
- Cortina, M., & Liotti, G. (2010). Attachment is about safety and protection, intersubjectivity is about sharing and social understanding: The relationships between attachment and intersubjectivity. *Psychoanalytic Psychology*, 27(4), 410–441.
- Cousineau, T.M., & Shedler, J. (2006). Predicting physical health: Implicit mental health measures versus self-report scales. *The Journal of Nervous and Mental Disease*, 194(6), 427–432.
- Dalenberg, C.J., & Paulson, K. (2009). The case for the study of “normal” dissociation processes. In: P.F. Dell & J.A. O'Neil (Eds.), *Dissociation and the dissociative disorders: DSM-IV and beyond* (pp. 145–155). New York: Routledge.
- Danner, D.D., Snowdon, D.A., & Friesen, W.V. (2001). Positive emotions in early life and longevity: Findings from the nun study. *Journal of Personality and Social Psychology*, 80, 804–813.
- Dekel, S., Hankin, I.T., Pratt, J.A., Hackler, D.R., & Lanman, O.N. (2015). Posttraumatic growth in trauma recollections of 9/11 survivors: A narrative approach. *Journal of Loss and Trauma*, 1–10. doi: [10.1080/15325024.2015.1108791](https://doi.org/10.1080/15325024.2015.1108791)
- Fonagy, P., Target, M., Gergely, G., Allen, J.G., & Bateman, A.W. (2003). The developmental roots of borderline personality disorder in early attachment relationships: A theory and some evidence. *Psychoanalytic Inquiry*, 23(3), 412–459.
- Goodman, G. (2005). Empirical evidence supporting the conceptual relatedness of object representations and internal working models. *Journal of the American Psychoanalytic Association*, 53(2), 597–617.
- Hesse, E., & Main, M. (2000). Disorganized infant, child, and adult attachment: Collapse in behavioral and attentional strategies. *Journal of the American Psychoanalytic Association*, 48(4), 1097–1127.
- Hirshfeld, D.R., Rosenbaum, J.F., Biederman, J., Bolduc, E.A., Faraone, S.V., Snidman, N., . . . , & Kagan, J. (1992). Stable behavioral inhibition and its association with anxiety disorder. *Journal of the American Academy of Child & Adolescent Psychiatry*, 31(1), 103–111. doi: <http://dx.doi.org/10.1097/00004583-199201000-00016>
- Kaufman, J.C. (2005). The door that leads into madness: Eastern European poets and mental illness. *Creativity Research Journal*, 17(1), 99–103.
- Kenny, D.T. (2011). *The psychology of music performance anxiety*. Oxford, UK: Oxford University Press.
- Kenny, D.T., & Ackermann, B.J. (2015). Performance-related musculoskeletal pain, depression and music performance anxiety in professional orchestral musicians: A population study. *Psychology of Music*, 43(1), 43–60.
- Kenny, D.T., Arthey, S., & Abbass, A. (2014). Intensive short-term dynamic psychotherapy for severe music performance anxiety. *Medical Problems of Performing Artists*, 29(1), 3–7.
- Kenny, D.T., Driscoll, T., & Ackermann, B.J. (2014). Psychological well-being in professional orchestral musicians in Australia: A descriptive population study. *Psychology of Music*, 42(2), 210–232.
- Kenny, D.T., & Holmes, J. (2015). Exploring the attachment narrative of a professional musician with severe performance anxiety: A case report. *Journal of Psychology & Psychotherapy*, 5(4), 1–6.
- Kernberg, O.F. (2008). The destruction of time in pathological narcissism. *International Journal of Psychoanalysis*, 89(2), 299–312.
- Ko, Y., & Kim, J. (2008). Scientific geniuses' psychopathology as a moderator in the relation between creative contribution types and eminence. *Creativity Research Journal*, 20, 251–261.
- Kohut, H. (1966). Forms and transformations of narcissism. *Journal of the American Psychoanalytic Association*, 14, 243–272.
- Kohut, H. (1972). Thoughts on narcissism and narcissistic rage. *Psychoanalytic Study of the Child*, 27, 360–400.
- Main, M., Hesse, E., & Kaplan, N. (2005). Predictability of attachment behaviour and representational processes. In: K.E. Grossman, K. Grossman, & E. Waters (Eds.), *Attachment from infancy to adulthood: Lessons from longitudinal studies* (pp. 245–304). New York: Guilford Press.
- Nachmias, M., Gunnar, M., Mangelsdorf, S., Parritz, R.H., & Buss, K. (1996). Behavioral Inhibition and Stress Reactivity: The Moderating Role of Attachment Security. *Child Development*, 67(2), 508–522. doi: [10.2307/1131829](https://doi.org/10.2307/1131829)
- Osborne, M.S., & Kenny, D.T. (2008). The role of sensitizing experiences in music performance anxiety in adolescent musicians. *Psychology of Music*, 36(4), 447–462. doi: <http://dx.doi.org/10.1177/0305735607086051>
- Peterson, C., Seligman, M.E.P., & Vaillant, G.E. (1988). Pessimistic explanatory style is a risk factor for physical illness: A thirty-five year longitudinal study. *Journal of Personality and Social Psychology*, 55, 23–27.
- Powell, B., Cooper, G., Hoffman, K., & Marvin, B. (2013). *The circle of security intervention: Enhancing attachment in early parent-child relationships*: Guilford Publications.
- Ramey, C.H., & Weisberg, R.W. (2004). The “poetical activity” of Emily Dickinson: A further test of the hypothesis that affective disorders foster creativity. *Creativity Research Journal*, 6(2 & 3), 173–185.
- Roisman, G.I., Fortuna, K., & Holland, A. (2006). An experimental manipulation of retrospectively defined earned and continuous attachment security. *Child Development*, 77(1), 59–71.
- Schimmenti, A. (2012). Unveiling the hidden self: developmental trauma and pathological shame. *Psychodynamic Practice*, 18(2), 181–194. doi: [10.1080/14753634.2012.664872](https://doi.org/10.1080/14753634.2012.664872)
- Schimmenti, A., & Caretti, V. (2016). Linking the overwhelming with the unbearable: developmental trauma, dissociation, and the disconnected self. *Psychoanalytic Psychology*, 33(1), 106–128. doi: [10.1037/a0038019](https://doi.org/10.1037/a0038019)

- Schimmenti, A., Passanisi, A., Pace, U., Manzella, S., Di Carlo, G., & Caretti, V. (2014). The relationship between attachment and psychopathy: A study with a sample of violent offenders. *Current Psychology, 33*(3), 256–270. doi: 10.1007/s12144-014-9211-z
- Schore, A.N. (1998). Early shame experiences and infant brain development. In: P. Gilbert & B. Andrews (Eds.), *Shame: Interpersonal behavior, psychopathology, and culture* (pp. 57–77). New York, NY: Oxford University Press.
- Schore, A.N. (2003). *Affect dysregulation and disorders of the self*. New York: W.W. Norton.
- Schwartz, C.E., Snidman, N., & Kagan, J. (1999). Adolescent social anxiety as an outcome of inhibited temperament in childhood. *Journal of the American Academy of Child & Adolescent Psychiatry, 38*(8), 1008–1015. doi: <http://dx.doi.org/10.1097/00004583-199908000-00017>
- Slochower, J. (1996). *Holding and psychoanalysis*. Hillsdale, New Jersey: The Analytic Press.
- Smith, J.R., Harré, R., & van Langenhove, L. (Eds.). (1995). *Rethinking Psychology: Conceptual Foundations* (Vol. 1). London: Sage.
- Thomson, P., & Jaque, S.V. (2012). Dissociation and the Adult Attachment Interview in artists and performing artists. *Attachment & Human Development, 14*(2), 145–160. doi: 10.1080/14616734.2012.661602
- van IJzendoorn, M.H., & Bakermans-Kranenburg, M.J. (2014). Confined quest for continuity: the categorical versus continuous nature of attachment. *Monographs of the Society for Research in Child Development, 79*(3), 157–167. doi: 10.1111/mono.12120
- Wertz, F.J. (2005). Phenomenological research methods for counseling psychology. *Journal of Counseling Psychology, 52*(2), 167–177. doi: 10.1037/0022-0167.52.2.167