How do we understand children's restlessness?

A cooperative and reflexive exploration of children's restlessness as a bioecological phenomenon

Anna Helle-Valle

Dissertation for the degree of philosophiae doctor (PhD)

at the University of Bergen

2016

Dissertation date: 25th of November 2016

© Copyright Anna Helle-Valle

The material in this publication is protected by copyright law.

Year: 2016

Title: How do we understand children's restlessness?

A cooperative and reflexive exploration of children's restlessness as a bioecological phenomenon

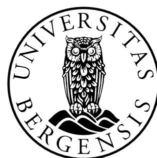
Author: Anna Helle-Valle

Print: AiT Bjerch AS / University of Bergen

Scientific environment

This PhD-project was funded by the University of Bergen. I have been a part of the The Grieg Academy Music Therapy Research Centre (GAMUT). I have been supervised by main supervisor professor Brynjulf Stige (The Grieg Academy, University of Bergen), and co-supervisors professor Per-Einar Binder (Department of Clinical Psychology, University of Bergen) and professor Norman Anderssen (Department of Psychosocial Science, University of Bergen, and Research Unit for General Practice, Uni Research Health). I have also been a part of Grieg Research School in Interdisciplinary Music Studies at the University of Bergen. GAMUT is a twin centre owned by both the University of Bergen and Uni Research, and particularly two groups within Uni Research Health have been important in relation to this thesis. Professor Guri Rørtveit, former leader of The Research Unit for General Practice in Bergen, and Reidar Jakobsen former leader at The Regional Center for Child and Youth Mental Health and Child Welfare, have been important in developing this research project as a cooperative initiative between these two units and GAMUT. The Regional Center for Child and Youth Mental Health and Child Welfare has also supported this PhD project through additional funding and by including me as an associated researcher.

Being part of this interdisciplinary scientific environment has enabled me to explore the concept of children's restlessness beyond conventional scientific demarcations, and for this I am very grateful.



Acknowledgements

I would like to thank all the children and adults who participated in this study whom, for the sake of anonymity, I cannot name. Their curiosity, cooperation, patience and dedication made this PhD possible.

I would like to thank my main supervisor Brynjulf Stige, and co-supervisors Per-Einar Binder and Norman Anderssen. Thank you Brynjulf for inviting me into unknown territory, for being patient with me, and for your generous and detail-oriented supervision. Thank you Per-Einar for following me down the rabbit hole when no one else was interested in supervising a paper on Alice in Wonderland. I am grateful that you were also willing to supervise this PhD. Thank you Norman for being frank and supportive, and for reminding me about the participants' perspectives.

I would like to thank Guri Rørtveit and Reidar Jakobsen for initiating and supporting this research project. Thank you to the Regional Centre for Child and Youth Mental Health and Child Welfare for additional funding, and for allowing me the position as associated member. I would also like to thank Arne Johan Vetlesen, Unni Johns, Sverre Chr. Wilhelmsen, Silje Erdem, Kjetil Andreas Nydal, the boys and their parents, for participating in my seminar about children's restlessness.

I would like to thank my friends and colleagues at GAMUT for their support and constructive critique. The reflections presented in this thesis have been shaped by professional and personal discussions with them. A special thank you to Merethe Wolff Lindvall and Anita Barsnes for their contributions to the thesis. I would also like to thank Jill Halstead and the Grieg Research School in Interdisciplinary Music Studies for supporting my cross-disciplinary interests. Thanks to Jørgen Aasen Berget for his contributions to the literature review, and to Svein Hermansen for proofreading this thesis.

I would like to thank my family and friends for making me who I am, for encouraging my exploration, and for being a safe base to which I always can return.

Finally, I would like to express my undying love and deep-felt gratitude to Jon and Mabel. Thank you for being in my life – everything begins with you.

Abstract

This thesis is a reflexive and cooperative exploration of children's restlessness as bioecological phenomenon. According to the ecological systems model, development can be understood as the result of interactions between the child's biological qualities and qualities in the surrounding ecological systems. According to the ADHD diagnosis, children's restlessness can be understood as a neurodevelopmental disorder that can be observed as biological, psychological and social symptoms and dysfunction. As a form of vitality, restlessness can be experienced and expressed as a certain combination of movement, time, force, space and intention/directionality.

In this thesis, restlessness is defined as the label given to an experienced form of vitality that appears in the space between the described and the describer. This definition points to the importance of the observing adult, and binds the acting child and the observing adult together in mutual revelation.

Possible biological mechanism that can give rise to children's restlessness include maturation, different genetic susceptibility, and play behaviour. Possible psychological mechanisms include motivation, identity formation, and musical improvisation. Possible social mechanisms include cultural mothering ideals, socio-economic status, and child maltreatment. An ecological systems model allows for the exploration of complex and multi-level relations between the person, the context and time. A community music therapy approach points to the importance of exploring the qualities involved in these ecological processes.

Children's restless behaviours have been understood and met in different ways within music therapy, partly depending on the context and on the music therapist/researcher. I critically reflect on what happens when children's boundaries are violated, whether restlessness can be related to gender, on the relative lack of system focus, and on the implicit goals of music therapy. I also reflect on whether theoretical orientation is related to therapeutic action, where the restlessness comes from and whether it can be understood as inter-contextual tension.

Paper 1 is a critical exploration of the position of the biopsychosocial model and ADHD in Norway. I argue that the different understandings discussed can be seen as pertaining to different levels of inquiry. These come with certain possibilities and limitations. **Paper 2** presents ecologically valid understandings of children's restlessness, that were created through cooperative inquiry with professionals and parents. Data were analysed using thematic analysis. Children's restlessness was understood as individual trait, expectations to be seen and heard, result of traumatisation, relational phenomenon, parent's problems, lack of cooperation in the community, and as lack of structures and resources. **Paper 3** is a case study of a collaborative community music therapy process with one boy and his friends. Their process is understood in terms of exploring musical vitality, consolidating positions, performing together and discovering ecological ripple effects.

Children's restlessness be understood as a bioecological phenomenon, where biological, psychological and social aspects are interrelated and co-constituting. Adding two 'new' levels to the ecological systems model can allow for a more precise integration of findings, and facilitate exploration of relations between findings that belong to different ecological levels. Children's restlessness be also understood as results of interactions between process, person, context and time. Actions, vitality forms and development can be seen as taking place within a certain *space of appearance*. Action can be seen as inherently unpredictable, as conditioned by plurality, and as defined in relation to an already existing web of relations.

Children's restlessness can be understood on the premise that children and adults are participating subjects acting on each other. Different contexts offer different possibilities and limitations, and music therapy can be used to increase children's possibilities for action. By regarding health as relational, *function* and *development* can be understood as relational and context-dependent. A relational approach to health can increase adults' possibilities for action and understanding. It also points to adults' responsibilities related to understanding children better and creating better contexts for children.

List of publications

Helle-Valle, A. (2014) How do we Understand Children's Restlessness? A Critique of the Biopsychosocial Model and ADHD as the Dominating Perspective in Current Understanding and Treatment. *Voices: A World Forum for Music Therapy*, 14(1)

Helle-Valle, A., Binder, P. E., Stige, B. (2015) Do we understand children's restlessness? Constructing ecologically valid understandings through reflexive cooperation. *International Journal of Qualitative Studies on Health and Well-being*, 10: 29292. http://dx.doi.org/qhw.v10.29292

Helle-Valle, A., Binder, P. E., Anderssen, N., Stige, B. (Submitted) The dynamics of ADHD in children – a critical standpoint.

The published papers are reprinted with permission from Voices: A World Forum for Music Therapy, and International Journal of Qualitative Studies on Health and Well-being.

Contents

SCIENTIFIC ENVIRONMENT **3**

ACKNOWLEDGEMENTS **4**

ABSTRACT **6**

LIST OF PUBLICATIONS **8**

CONTENTS **9**

1. INTRODUCTION **13**

1.1 CHILDREN'S RESTLESSNESS AS A RELATIONAL PHENOMENON 13

1.1.1 This thesis as a reflexive approach to children's restlessness 14

1.1.2 Moving through perspectives on children's restlessness 18

1.1.3 Defining restlessness for the purpose of this thesis 20

2. THEORETICAL FRAMEWORK **22**

2.1 DIFFERENT APPROACHES TO THEORY 24

2.1.1 Critical realism 25

2.1.2 How I relate to critical realism in this thesis 27

2.2 A BIOPSYCHOSOCIAL MODEL 29

2.2.1 Reflecting on possible biological mechanisms 30

2.2.2 Reflecting on possible psychological mechanisms 31

2.2.3 Reflecting on possible social mechanisms 33

2.3 AN ECOLOGICAL SYSTEMS MODEL 35

2.3.1 Ecological system levels 35

2.3.2 Process, person, context and time 37

2.3.3 Development as action and agency 39

2.3.4 Development as content 39

2.3.5 Ecological validity 40

2.4 A COMMUNITY MUSIC THERAPY APPROACH TO CHILDREN'S RESTLESSNESS 41

2.4.1 Qualities of a community music therapy approach 41

2.5 *CHILDREN'S RESTLESSNESS* AS THEORETICAL CONCEPT 43

3. LITERATURE REVIEW 46

3.1 FOCUS AND CRITICAL APPROACH 46

3.2 SEARCH STRATEGY AND RESULT 47

3.2.1 Children's restlessness in music therapy in North America (USA and Canada) 49

3.2.2 Children's restlessness in music therapy in Australasia (New Zealand and Australia)58

3.2.3 Children's restlessness in music therapy in South East Asia 63

3.2.4 Children's restlessness in music therapy in Europe 63

3.3 A CRITICAL INTERPRETIVE SYNTHESIS OF THE LITERATURE REVIEW 66

3.3.1 Eight critical questions 66

4. AIMS AND RESEARCH QUESTIONS 73

5. METHODOLOGY 75

5.1 HERMENEUTICS AND REFLEXIVITY 75

5.1.1 Hermeneutics 75

5.1.2 Reflexivity...77

5.2 ACTION RESEARCH..81

5.2.1 An action research approach to children's restlessness...82

5.2.2 Context of the study...84

5.2.3 The relationship between action and reflection in this study 86

5.3 METHODS FOR COLLECTING AND ANALYSING DATA 96

5.3.1 Collecting and analysing data from the cooperative inquiry 96

5.3.2 Collecting and analysing data from the community music therapy project 99

5.3.3 Methods and ecological validity 103

6. FINDINGS........105

6.1 SUMMARY PAPER 1........105

6.2 SUMMARY PAPER 2........106

6.3 SUMMARY PAPER 3........107

7. DISCUSSION........109

7.1 RELATIONSHIPS BETWEEN THE PAPERS........110

7.1.1 The papers as a development over time........110

7.2 CHILDREN'S RESTLESSNESS AS BIOECOLOGICAL PHENOMENON........113

7.2.1 Reflecting on bio-, psycho-, and social as system levels........114

7.3 CHILDREN'S RESTLESSNESS AS FORMS OF VITALITY, ACTION AND DEVELOPMENT........117

7.3.1 Action, vitality forms and development in the space of appearance........117

7.3.2 Plurality as a condition for human action........122

7.4 CHILDREN AND ADULTS AS SUBJECTS ACTING ON EACH OTHER........124

7.4.1 Possibilities and limitations in the context........125

8. STRENGTHS AND LIMITATIONS........130

9. CONCLUSION........133

9.1 A SHORT DISCUSSION SUMMARY........133

9.2 CONCLUDING REFLECTIONS........135

LITERATURE........138

10. APPENDICES........146

10.1 SEARCH STRATEGY........146

10.2 RESULTS OF THE LITERATURE SEARCH........147

10.3 ETHICAL APPROVAL BY REGIONAL ETHICS COMMITTEE........148

10.4 INFORMED CONSENT SHEET COOPERATIVE INQUIRY GROUP........150

10.5 INFORMED CONSENT SHEET COMMUNITY MUSIC THERAPY........152

....153

1. Introduction

> *The ecology of human development lies at a point of convergence among the disciplines of the biological, psychological, and social sciences as they bear on the evolution of the individual in society.*

--- Urie Bronfenbrenner in *The Ecology of Human Development*, 1979, page 13

1.1 Children's restlessness as a relational phenomenon

In this thesis I use an ecological systems model to reflect on how children's restlessness can be understood as a relational phenomenon. The introduction of an ecological systems model (Bronfenbrenner, 1979) marked a paradigmatic shift in developmental psychology (Navarez, Panksepp, Schore, & Gleason, 2013). According to an ecological systems model, development is not only determined by the parent-infant relation, but is understood as a result of the interaction between the child's biological qualities and the qualities of the surrounding ecological systems.

Around the same time as the ecological systems model was introduced, the biopsychosocial model (Engel, 1977) was suggested as a replacement for the medical model. The aim was to provide patients with better health care by expanding the focus from biology to also include psychological and social aspects the person's health. Attention-Deficit/Hyperactivity Disorder (ADHD) was first included in the *Diagnostic and Statistical Manual* of the *American Psychiatric Association* in 1980 (Neufeld & Foy, 2006), and is currently estimated to affect 5,29 % of all children (G. Polanczyk, Lima, Horta, Biederman, & Rohde, 2007). In Norway, the *International Classification of Disease* (ICD-10) is generally preferred over the DSM in clinical settings. ICD-10 uses the more restrictive classification Hyperkinetic Disorder (HKD) that is estimated to affect 1 - 2 % of children.

Norwegian research- and health authorities currently use the hybrid term *Hyperkinetic Disorder/ADHD* or simply *ADHD* (Andersson, Ådnanes, & Hatling, 2004). The prevalence of ADHD in the Norwegian child population is estimated to 5 % (Grøholt, Sommerschild, & Garløv, 2001), corresponding to the estimated global

prevalence of ADHD of 5.29 %. A recent meta-analysis shows that prevalence rates have further increased with around 2.5 % after the introduction of DSM-IV (G. V. Polanczyk, Willcutt, Salum, Kieling, & Rohde, 2014). The shift away from ICD to DSM in the Norwegian context is possibly affected by an increased focus on evidence based practice, as DSM is the manual that is most often used in research.

Children's restlessness is not only a relational phenomenon in the sense that it appears as an experience in a dyadic relation between for instance a teacher and a child. Based on an ecological systems model there are many relations that possibly affect children's restlessness: the relations between the child and other people in the child's immediate context, the relations between the different settings in which the child does or does not participate, and the relationship between these settings and the overarching structures that inform and make up the premises for these settings. Such overarching structures can for instance be the diagnostic manual that informs and shapes research and practice, and the presence or absence of critical or supplemental perspectives and practices.

1.1.1 This thesis as a reflexive approach to children's restlessness

In this thesis I explore the concept of *children's restlessness* from different perspectives. I reflect on ADHD as a diagnosis, but also as a broad and complex research field. I also reflect on how ADHD as an individual-and problem-oriented understanding dominates current mainstream understandings of children's restlessness. I understand ADHD not only as a diagnosis that is meant to reflect a subjective disorder, but as a social classification of certain kinds of behaviours and of individuals that display such behaviours (Nielsen & Jørgensen, 2010).

In this introduction I will first illustrate my own reflexive approach to children's restlessness by moving through different perspectives on children's restlessness. I do this in order to illustrate how reflexivity is a dynamic process that entails reflecting on several levels and from different positions. This is also meant to prepare the reader for a thesis in which I move between different perspectives and positions. Thereafter, I will shortly reflect on restlessness as symptom and as vitality.

Restlessness as diagnosis - ADHD

The ADHD diagnosis is listed under *Neurodevelopmental Disorders* in the DSM-IV (American Psychatric Association, 2013). There are five diagnostic criteria: A) A persistent pattern of inattention and/or hyperactivity-impulsivity that interferes with functioning or development, as characterized by inattention and/or hyperactivity and impulsivity. B) Several inattentive or hyperactive-impulsive symptoms were present before the age of 12. C) Symptoms are present in two or more settings. D) There is clear evidence that the symptoms interfere with, or reduce the quality of social, academic, or occupational functioning. E) The symptoms are not better explained by another mental disorder.

The diagnostic manual states that symptoms of ADHD are difficult to separate from normal behaviour before the child is 4 years, and that ADHD is most often identified during school years. Functional consequences associated with ADHD in childhood are reduced school performance and social rejection, and these children are likely to develop conduct disorder in adolescence, antisocial personality disorder in adulthood, and therefore more likely to develop substance abuse and incarceration. The heritability of ADHD is described as *substantial.*

The ADHD diagnosis is a description of how a child appears in a certain context. Researchers have tried to identify the biological, psychological and social mechanisms behind the behaviours described in the ADHD diagnosis. I present and reflect on some of this research in paper 1, paper 2 and under *Theoretical framework* in this comprehensive summary.

The biomedical model, also referred to as the medical model, emphasises diagnostic classification and evidence based practise. This model has been, and still is, central in psychotherapy research and practice (Duncan, Miller, & Sparks, 2007) and music therapy research and practice (Ansdell, 2002). In the late 70's the medical model was reviewed to include psychological and social health factors with the aim of improving patient care (Engel, 1977). However, in this review of the medical model, the physician was arguably still positioned as the expert with the knowledge necessary

for improving the health of the patient (page 133). By emphasising the importance of the *physician's* knowledge and skills, Engel could be understood as indirectly contributing to a practice in which the *patient's* resources and perspectives are potentially overlooked and undermined.

As psychological and social dysfunction is central to the ADHD diagnosis, I will from here on refer to the *biopsychosocial model* and not the biomedical model or medical model. However, the individual child's biology, physiology and genes are emphasised in Norwegian health authorities' understanding of ADHD (Sosial- og helsedirektoratet, 2005). From a critical standpoint, the increased prevalence of the ADHD diagnosis has been understood as an increased willingness to pathologise children's restlessness, and has been related to a general increased tendency of pathologising everyday problems (see for instance Nielsen & Jørgensen, 2010) .

In the DSM-IV, ADHD is presented as a neurodevelopmental disorder that give rise to dysfunctional behaviours associated with serious negative consequences. The focus revolves around the individual child, and the role of parents are reduced to that of *possible influence* in the single sentence that follows the headline *Course modifiers*: "Family interaction patterns in early childhood are unlikely to cause ADHD, but may influence its course or contribute to secondary development of conduct problems" (American Psychiatric Association, 2013, page 62). Under *Culture-related Diagnostic Issues*, cultural differences in the prevalence of ADHD are explained by differences in diagnostic and methodological practices, and referred to as differences in clinical identification rates. My impression after reading the descriptions in the DSM-IV is that ADHD is an extensive functional handicap that one is born with, that parents, if anyone, only *possibly* can affect the course of, and that is likely to provide the person in question with a poor life.

The emphasis on biology in ADHD can be understood as an ideology (Ekeland, 2006), and this ideology can be used to undermine user-perspectives, critical perspectives and reflexivity. An intolerance for critical perspectives and a lack of reflexivity can facilitate a practice in which children's resources and perspectives are

overlooked and undermined. One example is how children's communication about experienced side-effects from central stimulants, or their protests against taking medications, can be overlooked or re-interpreted as a symptom of ADHD or as oppositional behaviour (Olsvold, 2012).

Reflexivity about the strengths and limitations of using ADHD as an explanation for children's restlessness, is arguably also hindered by the authoritarian language in the diagnostic manual. Two examples in the DSM-5 (American Psychatric Association, 2013) are "ADHD begins in childhood" (page 61), and "*Hyperactivity* refers to excessive motor activity (such as a child running about) when it is not appropriate, or excessive fidgeting, tapping, or talkativeness" (page 61).

Restlessness as forms of vitality

Restlessness does not have to be understood as a symptom of neurodevelopmental pathology. The dynamics that are interpreted as restlessness can also be described in terms of for instance movement, timing and force. Stern (2010) refers to such aspects of human behaviour or experience as *forms of vitality*. Restlessness can manifest itself on different levels, for instance as a feeling, an experience, or as communication expressed through sound or movement or less visibly as an intention or an expectation. Stern (2010) defines *forms of vitality* as a manifestation of life that is expressed through movement and experienced and understood by a human being. Five naturally occurring dynamic events; movement, time, force, space and intention/directionality, together give rise to the experience of vitality in one's own movements and in the movements of others. Forms of vitality refers to *how* things are done, and the constantly ongoing movements in the mind and body inspires and maintains an experience of being alive.

The idea of forms of vitality can be used to outline the perhaps indescribable complexity of the holistically experienced world in which we constantly negotiate between external and subjective reality. Forms of vitality can be studied on different levels: at the level of physical stimuli, it can be observed as physical dynamics, on a neuronal level it can be observed as neuronal dynamics, on a psychological or

subjective level it can be explored as vitality dynamics, and on an elaborated psychological level it can be related to concepts like emotions and perceptions (ibid.).

It is difficult to pin down what restlessness *is*, but perhaps one can say that restlessness can be studied as synchronised communication, or lack thereof. In relation to development, children's innate communicative musicality can be seen as central to healthy parent-child bonding (Malloch, 2000). Beyond the parent-infant relation, children's natural musicality can also be understood as facilitating cooperative awareness, speech, and interest in shared meanings and the conventional uses of objects and actions (Trevarthen, 2000). In this thesis I will not give detailed descriptions of moments of shared or disrupted communicative musicality. I have chosen to use it as a contrast to a diagnostic approach, to facilitate a broader perspective on children's restlessness, and as a frame for describing *how* children participate.

1.1.2 Moving through perspectives on children's restlessness

In this thesis I aim to explore children's restlessness on different levels and from different perspectives. The point of departure for my PhD project was an interest in the position of Attention-Deficit/Hyperactivity Disorder (ADHD) as a way of understanding and meeting children's restlessness in general, and in community music therapy in particular. By talking to adults and children, reading a wide selection of literature, and through being a participant observer in a community music therapy project, I have exposed myself to different perspectives on children's restlessness. Some have criticised my choice of words and labelled it as negative. I partly agree with this criticism.

I chose to use the term *children's restlessness*, because the point of departure for this project was the ubiquity of ADHD and its position in explaining children's restless behaviours. By using the term *restlessness* as a way to operationalise a very real but also obscure phenomenon, I have tried to do two things: 1) to bridge understandings and practices in these fields by using a term that is both understandable and wide, and 2) to explore how children's behaviours, actions, communication and artistic

expressions become a focus when these are experienced by the adult population as disturbing or problematic. On the other hand, I see how my choice of term has steered the explorative process in the direction of problems and deficits, and I might have ended up focusing more on the positive aspects if I had chosen to explore children's creativity or vitality.

This project has made me more worried about how children are met, and it has sensitised me towards the fact that children adapt to survive mentally and physically, even at great costs. A confusing and enlightening aspect of this process has been the reoccurring experience that my experience and understandings can change as I move between different perspectives.

For instance, on a personal and philosophical level it feels disturbing that one can diagnose and medicate children that have no known physiological pathology in order to make them perform better in school. At the same time, I know that developmental differences can be found on a group level between children that fit and do not fit the behavioural descriptions in the ADHD diagnosis. Perhaps central stimulants might not be as bad if they enable these children to perform better and thereby increase their confidence and future possibilities? This "softening of opinion" is further enhanced if I try to put myself in the parent's shoes by adopting the pragmatic perspective that competition is fierce in education today, and that central stimulants can give children that struggle a leg up in this competition. I also empathise with exhausted parents that need efficient practical solutions and that can become better parents if their child is less restless.

As I move on to a critical perspective, my understanding continues to change: How come it says "these days, schools are struggling with a lack of resources" in the publications I read about the educational conditions of children in both 1975 and 2014? How come children's creativity has been reduced to a possible positive side effect of neurodevelopmental disease in research on ADHD? Why is it OK to diagnose and medicate children when it is the *adults'* problems with children's restlessness that often instigate the diagnostic process?

This PhD project has taught me that there is no one answer to these questions. I have also discovered that parents, practitioners and researchers feel strongly about this topic. I have found that most of the parents, practitioners and researchers that I have met are women, and that most of the children are boys. I have also discovered that research on children's behaviours and mental health not always serves the purpose of empowering the children that are diagnosed with ADHD or treated for restless behaviours. To me, doing this PhD has made it clear that there is a strong and urgent need for reflexive collaboration across disciplines, perspectives and positions that focus on understanding, empowering and improving the conditions for children in general and restless children in particular.

1.1.3 Defining restlessness for the purpose of this thesis

As a form of vitality, "restlessness" can be understood as an attempt to describe *how* a child does something. However, by using this word to describe a child's action, one is arguably describing *one's own experience* of that action. This experience might or might not be shared by others, not even by the child. This description might or might not be related to a *stereotype* in the culture in which the action takes place, for instance the stereotypes restless boys and quiet girls. The reflections in this thesis can be used to argue that ADHD represents a stereotypical understanding of children.

In this thesis I define restlessness as *the label given to an experienced form of vitality that appears in the space between the described (the child) and the describer (the adult).*

By using this definition, I conceptualise restlessness as a relational phenomenon. The *adult* is the describer; it is the adult's voice that constitutes both the descriptions in the ADHD diagnosis, in research on ADHD, and in the descriptions that are used in the diagnostic process and in this thesis. This means that adult's descriptions of children reveal something about the child and their ecological systems, but it also means that these descriptions *simultaneously* reveal something about the *adult* and his or her ecological systems.

According to the political thinker Hannah Arendt (1998), language is a form of action, and action carries with it the signature of the person that is acting. In this sense, the child's act carries with it information about the child, but the description of that act also reveals something about the person who is describing that act. In other words, the term *restlessness* binds the acting child and the describing adult together by mutual revelation, and places them in the world of the adult.

2. Theoretical framework

I have now given an introduction to how children's restlessness can be understood as a symptom of ADHD and in relation to forms of vitality. I have also presented a definition of restlessness with emphasis on relation and the position of the adult. In this section of the comprehensive summary, I will outline the theoretical framework that has shaped the theoretical reflections presented in paper 1, and the cooperative and practice-oriented inquiries presented in paper 2 and 3.

I have not worked within one theoretical framework or tested any specific hypothesis in this PhD project. And I am not attempting to generate a cohesive theory about the restlessness of children. Rather, I have taken this as an opportunity to reflect on the affordances and limitations of different theories about children's restlessness. I have also challenged myself and others to become aware of theoretical frameworks, to challenge these, and to integrate knowledge and evidence that have been constructed within different theoretical frameworks. For instance, restlessness can be understood as sign of complex traumatisation by using a regulation-oriented theory of development (Braarud & Nordanger, 2011), as an executive-functions deficit if one adheres to a self-control theory of ADHD (Russell A. Barkley, 2005), and as a natural expression of vitality within a Gestalt-inspired theory of psychological dynamics (Stern, 2010).

My process has been one of reflexivity. Reflexivity is defined by Alvesson and Sköldberg (2009) as "a particular, specified version of reflective research, involving reflection on several levels or directed at several themes" (page 8). I write more about reflexivity under *Methodology*. In this thesis I reflect on children's restlessness on several levels by using findings and theories from three different philosophies of science: (post-) positivism, social constructionism and critical realism. The majority of the findings presented here that use ADHD as a reference point, stem from a post-positivistic approach to knowledge and research. Within this tradition it is common to use quantitative methodologies (Alvesson & Sköldberg, 2009).

Unlike (post-) positivism, social constructionism is mainly qualitative and reality is seen as socially constructed (ibid.). Rather than fitting one single description, social constructivist approaches can be seen as sharing a certain *family resemblance* (Burr, 2015). This family resemblance entails taking a critical stance toward taken-for-granted knowledge, exploring the historical and cultural specificity of this knowledge, and a acknowledging the close relation between knowledge and social action (ibid.)

Critical realism typically bridges quantitative and qualitative studies, and has been suggested as a possible successor to social constructionism (Alvesson & Sköldberg, 2009). According to critical realism, both positivism and social constructionism facilitate knowledge that is too superficial, unrealistic and centred around the human being. The focus of critical realism is to explore and identify relationships and non-relationships between what we experience as human beings, what actually happens and the underlying mechanisms that produce these events (Danermark, Ekström, Jakobson, & Karlsson, 2002).

In relation to children's restlessness critical realism facilitates the separation and exploration of experiences made by the observing adult, the child, what actually happens and the underlying biological, psychological and social mechanisms. The reason I have chosen to define restlessness with an emphasis on the adult's experiences, understandings and ecological context, is that ADHD is a concept constructed by adults, the diagnostic process is initiated and carried out by adults, and the research on ADHD is written by and for adults. Another reason is that children's experiences are hard to access, and, as I discuss in paper 2, the concept of ADHD can serve to relieve adults from shame, guilt and responsibility. This places adult experiences, understandings and ecological context at the centre in a research field that is dominated by a focus on identifying biological mechanisms in the child.

2.1 Different approaches to theory

The concept of *theory* is understood and treated differently within (post-) positivism, social constructionism and critical realism (Alvesson & Sköldberg, 2009). According to (post-)positivists, theories are human-made linkages between single-sense data. According to social constructionists, all knowledge is linked to social constructions and should not rise too high above these. Theories have a central role in critical realism, as critical realists believe that there is a world independent of human beings, and that deeps structures that form underlying patterns can be described by scientific theories (ibid.).

In this thesis I compare and integrate understandings that belong to different scientific traditions. This PhD project has been very much inspired by critical research and can in many ways be seen as belonging to a social constructionist tradition. After discovering critical realism rather late in the PhD project, I found that this tradition enabled a fruitful exploration of the relationship between evidence from a post-positivistic tradition and critical reflections from a social constructionist tradition. I have been writing from a critical position, particularly in paper 1, because I see the importance of criticising the problem and individual-oriented understanding of children's restlessness that is conveyed by the focus and language of the ADHD diagnosis. However, I recognise that there is biological variation and that some children might be born with a tendency to be more extrovertly vital or restless than others. However, I agree with the view that within the field of ADHD, biology often has been used as an overarching ideology that undermines contextual factors and the importance of culture, politics and knowledge traditions (Ekeland, 2006).

The fact that I use research from different philosophies of science that relate differently to the concept of *theory*, has made it challenging to write this section of the comprehensive summary. I have followed the concept of *children's restlessness* and reflected on how children's restlessness is studied, represented and explained. The literature review presented in this comprehensive summary can also be read as an

illustration of how I have searched for relevant literature and how I have reflected on what I have found.

I will now give a short presentation of critical realism, and then present a biopsychosocial perspective on children's restlessness by looking at potential biological, psychological and social mechanisms that can give rise to the behaviours described in the ADHD diagnosis. Thereafter, I will outline a community music therapy approach to children's restlessness by using the defining qualities described by Stige and Aarø (2012). Finally, I will reflect on children's restlessness as a theoretical construct.

2.1.1 Critical realism

Critical realism originated from the writings of the philosopher Roy Bashkar, and also draws on Marx' view of science (Alvesson & Sköldberg, 2009). Critical realism is radical in the sense that the aim is not simply to describe the world, but also to change it for the better. In critical realism, the focus is on uncovering underlying mechanisms that generate what can be observed as empirical phenomenon. In philosophical terms this entails a change in focus from epistemology to ontology, and within ontology a change in focus from events to mechanisms (Danermark et al., 2002).

The aim of critical realism is to explore the complex networks of theoretical and observable elements that go beyond social phenomena, and in this way learn about objective reality (Alvesson & Sköldberg, 2009). Critical realism departs from the understanding that the world is structured, differentiated, stratified and changing (Danermark et al., 2002). Critical realism does not accept a distinction between theory and observation, as observations will always carry in them theoretical assumptions. According to critical realists, failing to recognise the distinction between ontology (what exists) and epistemology (how we theorize reality) should be regarded as an *epistemic fallacy.*

Danermark (2002) summarises critical realism in this way (page 1):

> *Critical realism helps us to develop and more sharply argue for, first, that science should have generalizing claims. Second, the explanation of social phenomena by revealing the causal mechanisms which produce them is the fundamental task of research. Third, in this explanatory endeavour abduction and retroduction are two very important tools. The latter is closely related to critical realism, and is a method for finding the prerequisites or the basic conditions for the existence of phenomenon studied. Fourth, the role of theory is decisive for research.*

Critical realists would argue that variables do not mirror facts; they are conceptual interpretations. Likewise, correlations between variables are not to be taken as causal relations; they are descriptions (Cruickshank, 2003). This points to the importance of language in communicating conceptual interpretations. Critical realism does not come with a set of methods (Alvesson & Sköldberg, 2009).

Criticism of critical realism

Alvesson and Sköldberg (2009) describe two main objections to critical realism. The first criticises assumptions made by critical realists concerning objectivism and that their claims regarding scientific inquiry can be seen as exaggerated. The second addresses the arguably unproductive concepts of *structure* and *mechanism*.

The proponents of critical realism use the concept *objective reality* with undue confidence, according to Alvesson and Sköldberg. The central task of researchers is, according to critical realists, to identify “the necessary, constituent properties of the study object, since these characteristics define what actions the object can produce” (Danermark, 2002, page 70). Alvesson and Sköldberg point out that for critical realists it seems that the object of study should disclose itself and tell the researcher how it is most appropriately studied. They propose an alternative approach based on the notion that one can never describe the object *as such*. Rather, understandings always are framed by paradigmatic, methodological assumptions, a certain vocabulary and political stances.

The centrality of preunderstanding and interpretation to this critique, is further specified in relation to the fact that different researchers will have different views regarding the 'necessary constitutive properties' of the object studied, the nature of these properties and the events that these objects can be seen as capable of producing. A summary of Alvesson and Sköldberg's criticism of critical realism is that it is not so easy to assert the existence of structures, mechanisms and the constitutive properties of objects of study.

2.1.2 How I relate to critical realism in this thesis

The affordances of critical realism, and relevant critique of this approach to research, would concern the necessary constitutive properties that make up children's restlessness, the biological, psychological and societal nature of these properties. It would also concern *how* these properties together produce events of restlessness that can be observed and measured. Critical realists aim not only to discover the world; they aim to improve it. It can be naïve and yet another exaggerated claim that it is possible to improve the world. However, this resonates well with my own intentions: I want to research children's restlessness not only to understand it better, but also to facilitate change that will provide children with better and safer ecological contexts from micro to macro.

I am not claiming to have found the necessary constitutive properties that make up children's restlessness. However, I find critical realism to be an interesting alternative to limiting myself to post-positivist evidence or not going beyond social constructions. Without devoting myself to critical realism, I will now reflect on some instances in which this philosophy of science can contribute with useful perspectives in relation to children's restlessness.

The affordances of critical realism in relation to children's restlessness

Alvesson and Sköldberg's critique of objectivist assumptions in critical realism, fits with *alethic hermeneutics* where preunderstanding and understanding are seen as co-constitutive, and as central to any research activity (see *alethic hermeneutics* under *Methodology*). Not unlike critical realists, I reflect on possible biological,

psychological and social mechanisms behind children's restlessness. I also reflect on how these mechanisms are understood and met in children's ecological contexts, which again point to the centrality of hermeneutic processes and cooperative inquiry (paper 2). I discuss the position of the ADHD diagnosis in paper 1, reflect on the underlying mechanisms of children's restlessness with other adults in paper 2, and describe and discuss the mechanisms behind restlessness as an observed dynamic phenomenon in paper 3.

The overarching methodologies presented in this thesis, reflexivity and action research, arguably fit well with a critical realist approach. Reflexivity has allowed me to reflect on different epistemological interpretations of children's restlessness. Reflexivity has also allowed me to compare and criticise how children's restlessness is understood, with the aim of learning more about the possible mechanisms that make up underlying patterns (ontology) that give rise to events of restlessness. Action research, and cooperative inquiry in particular, fits well with critical realism as it involves itself with exploring knowledge production (epistemology), but also in that it aims at improving practice.

Critical realism can facilitate reflections about the reality of ADHD. According to the authors of the *International consensus statement on ADHD* (R. A. Barkley, 2002), ADHD is *real*. By drawing on critical realism, one could argue that ADHD is not *real* because it belongs to the domain of the empirical, and reality cannot be observed directly in the domain of the empirical. Also, one could question the fact that in mainstream research on ADHD there seems to be little discussion about the theoretical nature of this concept.

Critical realism can facilitate an exploration of whether mechanisms that might make up the transfactual conditions for children's restlessness, are overlooked. These mechanisms might be biological, like dopamine levels or like the activation of cognitive patterns related to improvisation or the processing of music. These mechanisms might be social, like the institutional, systemic and cultural conditions for children's participation. In critical realism, the world is conceived of as stratified,

differentiated, structured and changing (Alvesson & Sköldberg, 2009). This worldview challenges notions about control and predictability that seem central to a post-positivism and current mainstream practices related to children's restlessness. The ecological systems in which children develop seem to rely heavily on empirical and theoretical categories like ADHD, which seems to afford a sense of control and predictability (see paper 1 for related discussions).

The message of current mainstream research on ADHD seems to be: by identifying and treating ADHD, we can control, predict and improve children's development. In paper 1, I question whether research that does not corroborate this assumption tends to be overlooked or not communicated out into the practice field. The motivation to know more about ADHD, for instance as communicated by the participants in the cooperative inquiry group (paper 2), could be understood in relation to this lack of communication regarding uncertainty and complexity of mechanisms contributing to children's restlessness, how events of restlessness *could* be interpreted and how these restless events currently *are* interpreted.

2.2 A biopsychosocial model

The biopsychosocial model was introduced under the headline 'The need for a new medical model' in the late 70's by Engel (1977). Engel argued that by including psychological and social aspects of patents' health, in addition to the biological aspects, clinicians would be able to provide these patients with better health care. The biopsychosocial model is the conceptual *status quo* of contemporary psychiatry, but has also been criticised for being too wide thereby devolving into mere eclecticism (Ghaemi, 2009). The ADHD diagnosis fits with a biopsychosocial model as symptoms of psychological and social functioning are central in supporting the claim that the child suffers from neurodevelopmental dysfunction.

In an attempt to explore what in critical realism would be referred to as underlying mechanisms, I will now present a selection of research based on a biopsychosocial model. I will use this opportunity to reflect on possible biological, psychological and

social mechanisms that can give rise to children's restlessness. The literature is not representative for mainstream research on ADHD, but serves the purpose of outlining a wider range of mechanisms that possibly can contribute to children's restlessness. The findings presented here have been selected because they point to the importance of understanding the biological, psychological and social as related and mutually constituting dimensions.

2.2.1 Reflecting on possible biological mechanisms

Maturation

Longitudinal studies indicate that the structural neuropathology found in children diagnosed with ADHD normalize over the course of up to three years (Vaidya & Stollstorff, 2008). This means that ADHD could be understood as delayed *normal* development. In relation to neurochemical pathology, dopamine and norepinephrine are involved in modulating brain activity, e.g. norepinephrine in regulating arousal and dopamine in reward processing (ibid.). A moderate level of norepinephrine and dopamine is seen as optimal, as too much can heighten distractibility and too little can cause inattentiveness. Methylphenidate, for instance Ritalin, has proven efficient in treating symptoms of ADHD, but the efficacy of this central stimulant varies with context, for instance is the reduction of symptoms greater in a classroom setting than in a playground setting (Vaidya & Stollstorff, 2008).

Differential susceptibility

Epigenetic research indicate that those most susceptible to adversity because of their genetic make-up are simultaneously most likely to benefit from supportive and enriching experiences. This discovery has made researchers argue that there is a need for a new framework of *differential susceptibility* rather than that of individual vulnerability (Belsky et al., 2009). For instance, there is a growing body of research literature that links negative emotionality in infants to the fact that they might have an increased susceptibility to *both* positive and negative factors in the environment. For instance, these children do *worse* than others under poor rearing conditions, and *better* than others under good ones (Pluess & Belsky, 2010).

There are still many questions to be answered, but a differential susceptibility framework could be used to challenge the focus on negative behaviour in the ADHD diagnosis. Should children that are perceived as difficult rather be thought of as extra malleable and particularly susceptible to supportive and enriching experiences? This new framework also warrants political discussions about the differences in conditions that have profound effects on the child's ecological system. These could be parent employment, the number of qualified kindergarten teachers per kindergarten, children's rights, politically governed guidelines for local help services, or local differences in structures and cultures when it comes to health promotion, prevention, referral, assessment, treatment and follow up.

Adaptive play behaviour

Restlessness can be understood as play behaviour that is a vital part of children's social and neurobiological development. The neurobiologist Jaak Panksepp reflects on the language in the ADHD diagnosis:

> (…) *distractability* may be a useful trait when one needs to efficiently monitor a variable environment. *Impratience* may be a good trait when one needs to rapidly shift into a result-oriented mode of action. We can wonder whether *difficulty following instructions* might not reflect a high dose of *independent judgement*, and whether *acting without regard to consequences* might not reflect a greater *willingness to take risks and face dangers*. (Panksepp, 1998, p. 92-93)

Panksepp argues that if this is the case, the societal difficulties we have with restless children may reflect our recent cultural evolution more than the existence of any pathological deviance.

2.2.2 Reflecting on possible psychological mechanisms

Motivation

Often, but not always, children diagnosed with ADHD display "motivational deficits", "atypical reward-related modulation of the orbitofrontal striatal network",

and “altered functional connectivity between mesolimbic and frontalstriatal regions” (Vaidya & Stollstorff, 2008). This means that children who fit the ADHD diagnosis often show different cognitive patterns of activity than most children when it comes to motivation, reward-processing and executive functions. In ADHD research these differences in brain activation are often labelled *deficits*, and treated as abnormalities in the child’s brain that cause impaired function. However, findings that indicate differences in cognitive activation at a group level, cannot be used to prove the presence of such patterns of brain activation in one particular child displaying symptoms of inattention or hyperactivity. It would be simplistic to think that these group differences can provide the answer to how these children are to be understood or treated. These group level differences do not give us information about the experiences and meaning-making processes that these children are involved in, nor does it prove that these patterns of brain activity needs to result in functional problems.

Identity

Aina Olsvold (2012) has performed a series of in-depth interviews with children and their parents about receiving an ADHD diagnosis and being on medication. Several of the children talk about ADHD as something negative, and the severity of the drama that they enter by getting this diagnosis is often underestimated. Olsvold writes:

> For Jonas and for most of the other children in this study, ADHD actualises what the American sociologist Erving Goffman so fittingly calls the drama of normality and deviation. The severity of this drama has surprised me (…). It is a drama that takes place on the inner and outer scene, in the inner and outer world. It is about identity, the personal and social identity, it is about who one is in the eyes of oneself and others. (Olsvold, 2012, p. 145, my translation)

ADHD is not only a diagnosis, it also plays into the important and vulnerable process of understanding oneself and *becoming someone* in the wider social context.

Music and improvisation

Listening to music has shown to strongly modulate activity in the mesolimbic structures that regulate autonomic and physiological responses to rewarding and emotional stimuli (Menon & Levitin, 2005). Furthermore, a study on musical improvisation has shown that during musical improvisation, regions involved in self-monitoring and focused attention are deactivated, creating a cognitive context of defocused, free-floating attention that permits spontaneous unplanned associations, and sudden insights or realizations (Limb & Braun, 2008). Improvisation suspends self-monitoring and related cognitive processes that contribute to goal-directed, predictable or planned actions (ibid.). Musical improvisation can thus be highly rewarding and motivating, but might not facilitate the focused and externally oriented attention that is desired within the ADHD paradigm. To my knowledge there is not yet any research on the neurological effects of community music therapy, or the effect of community music therapy on ADHD.

2.2.3 Reflecting on possible social mechanisms

Mothering ideals

The global presence of the ADHD diagnosis has made it a powerful and cross-cultural perspective on children's restlessness that arguably has a profound impact on the actions of both adults and children, as well as on their interaction. For instance, relational tensions and differences between mother, father and child is profoundly affected and perhaps revealed, when ADHD "enters the picture" (Olsvold, 2012). Interestingly, getting an ADHD diagnosis and putting the child on medication seems to be the mother's project (Olsvold, 2012; Ilina Singh, 2004). An ADHD diagnosis enables a shift in blame from the mother to the child's brain. However, interviews with mothers of boys diagnosed with and treated for ADHD indicate that the medicalisation of these boys' behaviours reconstitutes the potential for mother-blame, and does little to pierce oppressive cultural mothering ideals (Ilina Singh, 2004).

Socio-economic status

Growing up in the context of lower socio-economic status increases the risk of receiving a mental health diagnosis (Bøe, Øverland, Lundervold, & Hysing, 2012). The correlation between socioeconomic status and ADHD seems to be mediated by parent attachment and family conflict (Bøe, 2013; Russell, Ford, Rosenberg, & Kelly, 2014). The language used to describe children's behaviours in the ADHD diagnosis arguably reflects adult satisfaction with the child's behaviour and academic performance. *Cognitive enhancement*, the practice of prescribing performance-enhancing drugs to healthy children and youth, has now been recognized as a part of normal medical practice (Illina Singh, Filipe, Bard, Bergey, & Baker, 2013). However, medical treatment is not necessarily required to enhance children's school performances. Emotional and instructional support in the classroom has shown to level the differences between first-graders perceived as at risk of school failure due to demographic characteristics and multiple functional problems (e.g. problems with attention, behaviour and motivation), and their low-risk peers (Hamre & Pianta, 2005). A child's socio-economic context, possibly mediated by parents' abilities to create a context of relational security and a warm family environment despite social and economic adversities, is likely to affect the coming-into-being of an ADHD diagnosis.

Child maltreatment

Children exposed to maltreatment struggle with regulating affect, attention, and social bonds, and ADHD is a common diagnose in this population (Ackerman, Newton, McPherson, Jones, & Dykman, 1998; Kolk, 2005). There is also a strong link between childhood abuse and being diagnosed with ADD or ADHD in adult life (Fuller-Thomson, Mehta, & Valeo, 2014). Both in Norway and globally, child maltreatment is more prevalent than ADHD. ADHD has an estimated global prevalence of 5.29 % (G. Polanczyk et al., 2007). In comparison, the estimated global prevalence of child maltreatment is 12.7 % for sexual abuse, 22.6 % for physical abuse, 36.3 % for emotional abuse, 16.3 % for physical neglect and 18.4 % for emotional neglect (Stoltenborgh, Bakermans-Kranenburg, Alink, & van Ijzendoorn, 2015).

In Norway, in which corporal punishment has been illegal since 1980 (Kristjansson, 2006), at least 3-9 % of the child population still experience severe physical abuse that include hitting, beating, kicking, shaking, biting, strangling, scalding, burning, poisoning or suffocating (Kloppen, Mæhle, Kvello, Haugland, & Breivik, 2014). At least 7 – 12.5 % witness violence in the family. The former Norwegian Minister of Children, Equality and Social inclusion recently published what she called a diatribe for children's rights, in which she called violence against children a national taboo and referred to the ADHD diagnosis as a potential hindrance in discovering the most vulnerable children (Thorkildsen, 2015).

2.3 An ecological systems model

I have now presented a purposive sample of biopsychosocial research that has allowed me to reflect on possible biological, psychological and social mechanisms that can contribute to children's restlessness. It seems that children's restlessness as ADHD is not only affected by biological processes, but by processes on several levels that to a greater or lesser extent involves the child directly. I will now present an ecological systems model, in which children's development is described as a dynamic and multilevel relational process that unfolds in context.

2.3.1 Ecological system levels

According to an ecological systems model, the ecological environment that surrounds the developing child can be conceived of as a set of nested structures (Bronfenbrenner, 1979). The pattern of connectedness between persons in the immediate setting is referred to as *miscrosystem*. The pattern of connectedness between the different immediate settings is referred to as *mesosystem* if the child participates in these settings, and as *exosystem* if the child does not participate in these settings.

The complex network of relations between interconnected micro-, meso- and exo-systems can also be understood as manifestations of overarching structures like ideology and the organisation of social institutions. Such generalized patterns are

referred to as *macrosystems*. Macrosystems tend to be particular to specific cultures or subcultures. This means that within one macrosystem, the structure and content of micro-, meso-, and exo-systems tend to be similar. This is relevant in relation to ecological validity, and indicates that descriptions of structure or content within one macrosystem can be relevant for other similar units within this same macrosystem. For instance, kindergartens tend to be organised in a similar way within Norway.

The organising properties of macrostructures also points to the relevance of reflecting on the context-specific nature of understandings and empirical evidence, as these are created within a specific macrosystem. For instance, is empirical evidence discovered (or constructed) within (and for) a specific American macrostructure directly transferable to a Norwegian context? I would argue that profound differences between macrosystems in USA and Norway, for instance the duration of granted maternity leave, socio-economic differences in the population, the organisations and quality of kindergartens (or day-care or preschools), the emphasis on children’s rights and organisation of health care, point to a responsibility for researchers to “translate” and interpret research on and theories about children’s restlessness. However, there are also similarities between these macrosystems, for instance the emphasis on the central role of the mother in the diagnostic process, the high prevalence of boys with ADHD, and the desire for cooperative children who sit still, concentrate and perform well in school.

The microlevel described in this thesis is the kindergarten, and in the third paper I write about the children’s participation in the community music project in kindergarten. In paper 3 I focus on the dynamics of one microsystem in a particular kindergarten, but I also reflect on ripple effects at a mesolevel by describing relations between the microsystems of kindergarten, home and school. The mesolevel is more clearly a focus in paper 2, in which adults from different but connected contexts in one local environment come together and discuss ADHD and restlessness.

In paper 1 I reflect on both macro- and exo-/mesolevel by discussing the dominating position of the ADHD diagnosis in statements made by Norwegian clinical-political

authorities. I have looked at certain aspects of the Norwegian macrosystem in relation to how children's restlessness is understood and handled. Reflections presented in this paper, can be used to argue that that Norwegian macrosystems (the system for research, the health system, the educational system) have been profoundly affected by the North-American macrosystems for handling children's restlessness via the import of the ADHD diagnosis and through the extensive (and arguably narrow) focus on evidence. I say narrow, because evidence in both the Norwegian and North-American macrosystems tend to be understood as quantitative evidence of individual pathology.

2.3.2 Process, person, context and time

An ecological systems model for development is also referred to as the *bioecological model* or as the *Process-Person-Context-Time Model* (Lerner, 2005), as it involves these four elements (page xv):

> *(a) the developmental* process*, involving the fused and dynamic relation of the individual and the context; (b) the* person*, with his or her individual repertoire of biological, cognitive, and behavioural characteristics; (c) the* context *of human development, conceptualized as the nested levels, or systems; […] (d) and* time*, conceptualized as involving the multiple dimensions of temporality – for example ontogenetic time, family time, and historical time – constituting the chronosystem that moderates change across the life course.*

Defining development

The person is at the centre of the microsystem. According to the ecological systems model development can be defined as (Bronfenbrenner, 2005, page 3):

> *(…) the phenomenon of continuity and change in the biopsychosial characteristics of human beings both as individuals and as groups. The phenomenon extends over the life course across successive generations and through historical time, both past and present.*

Children's development can be understood as a process of both *individual and group change* over time and in the present. This definition fits well with the general approach to children's restlessness described in this thesis. In particular, it fits well with the analysis carried out in paper 3, in which we looked at the development of restlessness in relation to both the individual and the group. In paper 1 I criticise the

position of the biopsychosocial model and the ADHD diagnosis, by pointing out that we must recognise that there are different levels when it comes to how we understand children's restlessness. The ADHD diagnosis creates a focus on the individual and on problems, so if one intends to understand children's development as a complex process that unfolds as interaction between many different levels, one must actively look for and reflect on the aspects of children's restlessness that extend beyond the individual, beyond biology and beyond problems.

As a participant observer (paper 3) I was able to look for and reflect on several aspects of children's restlessness. As the children shared their experiences with the music therapy students and myself, as we *experienced together* and as our *project* developed, I felt the growing need to put these dynamics centre stage. Was this restlessness? Was it life experienced? Was it the uncovering of a way of being together that could be put into a 'restlessness box', but that perhaps should be allowed to be what it was; unique and temporarily existing meetings between human beings that tried to understand each other and do something together?

In this thesis I define children's restlessness as *the label given to an experienced form of vitality that appears in the space between the described (the child) and the describer (the adult)*. This definition invites an understanding of children's restlessness that emphasises relational qualities. In keeping with an ecological systems model, I understand relation not only as dyadic relation between to individuals, but as a web of relations between the biological, psychological and social aspects of individuals (micro), groups (meso) and overarching structures (macro). I emphasise the *defining role* of the adult and the subjectivity of adult descriptions. We tend to forget that the descriptions adults make of children, also reflect their own developmental history that has taken place within a certain ecological system. A more child-centred understanding might call for reflexivity regarding the language we use to describe children, and to what extent this language echoes macrostructures developed by and for adults.

2.3.3 Development as action and agency

Understanding children's restlessness entails exploring the relations between an individual's development (ontology), the development of the family and local community of this individual, the historical development of the society and culture in which this individual develops, as well as the development of the human species to which this individual belongs (phylogeny). Can we ascribe responsibility for a certain behaviour to the individual child if his restlessness can be understood as a result of complex interrelations between him and his family, his local community, historical developments in the culture and society to which he belongs, as well as the historical development of his species? The political thinker Hannah Arendt reflects on the relationship between action and agency (Arendt, 1998, page185):

> *The perplexity is that in any series of events that together form a story with a unique meaning we can at best isolate the agent who set the whole process into motion; and although this agent frequently remains the subject, the 'hero' of the story, we never can point unequivocally to him as the author of its eventual outcome.*

From a diagnostic perspective, the child who is identified as setting a process into motion by for instance behaving in a restless way, is seldom described as 'hero'. Children that are identified as restless in Western cultures are most often given the role as either 'victims' or 'delinquents' (Timimi, 2005). Current mainstream understandings of children's restlessness contrast an understanding of action and agency as described by Arendt. According to current mainstream understandings, it seems that early intervention will afford predictability and future control over the child's actions.

2.3.4 Development as content

An ecological systems model emphasises the *content* of a child's development rather than the development of general skills. Rather than looking at perception, motivation and learning, the focus is on *what* the child perceives, desires, fears or thinks about. This content changes as a function of the person's exposure to and interaction with the environment (Bronfenbrenner, 1979, p. 9):

> *Development is defined as the person's evolving conception of the ecological environment, and his relation to it, as well as the person's growing capacity to discover, sustain, or alter its properties.*

In this thesis I have defined restlessness as *the label given to an experienced form of vitality that appears in the space between the described (the child) and the describer (the adult).* A challenging development throughout this thesis, has been relating this definition to the interesting events in the microsystems I have participated in and observed.

After the community music therapy project had ended, I interviewed all the 13 children about their experiences during the project, asked them about differences and similarities between these experiences and they everyday life in kindergarten and at home, and encouraged them to make suggestions about how we could improve this project if we were to do it again. Due to time limitations, I was unfortunately not able to write a paper based on these interviews in time for the publication of this thesis. According to current guidelines, findings that have not been described in the papers, cannot be included in the comprehensive summary.

2.3.5 Ecological validity

According to an ecological systems model, children's development entails a reorganisation of children's personal characteristics that has some continuity over time and space (Bronfenbrenner, 1979). Developmental changes are manifested concurrently in children's perception and action, and both perception and action relate to the whole ecological system in which the child develops. This means that in both perception and action, the child is affected by, and needs to relate to a world that extends beyond the immediate context. The child needs to act in a way that provides the child with accurate feedback about the systems that exist at increasingly more remote and abstract levels. The child also needs to act in a way that keeps these systems functioning. Lastly, the child needs to be able to reorganize existing systems to better fit his or her own desires, needs and skills (ibid.).

Based on this understanding of development as an active and complex multileveled process in which the child is a participating subject, Bronfenbrenner (1979) suggested the following definition of *ecological validity* (page 29:)

> *Ecological validity refers to the extent to which the environment experienced by the subjects in a scientific investigation has the properties it is supposed or assumed to have by the investigator.*

This definition was arguably made with psychological experiments in mind, but it is highly relevant in relation to the ADHD diagnosis, diagnostic assessment, treatment and adult understandings of children's restlessness in general. It also positions the child as a subjective *experiencer*, not merely an object of research that is measured on the level of behaviour. This points to the importance of phenomenology in psychological research. The importance of phenomenology when it comes to research on children is not only a methodological challenge, but a value and a reminder that children are people too.

2.4 A community music therapy approach to children's restlessness

An ecological systems model of development assumes that children's development is a relational process that involves many ecological levels, and that unfolds in a certain context. Rather than being interested in general processes of maturation, the focus is on the content of these processes. This understanding of children's development fits well with community music therapy. In paper 3 I use community music therapy as a theoretical framework for understanding children's restlessness, and as a context for exploring children's restlessness. I will now outline some qualities central to a community music therapy approach that have informed this study.

2.4.1 Qualities of a community music therapy approach

Rather than being one uniform perspective of practice, community music therapy can be considered a family of context sensitive practices that value human connectedness and multi-voiced communities (Stige & Aarø, 2012). Music is primarily treated as a

communal activity, *musicking*, that can be used to mobilize resources and promote health, wellbeing and development. *Therapy* is defined widely, and can include meanings such as *care* or *service*, and can also include practices like health promotion and social change. A music therapy intervention can increase people's possibilities for action by addressing obstacles pertaining to the individual and to societal structures (Ruud, 1998). In community music therapy a therapist or researcher can contribute to such increased possibilities for action both directly and indirectly. *Directly* they can facilitate the creation of a space in which those involved can communicate face-to-face with a wider audience, and *indirectly* they can facilitate better contexts for those involved by identifying problems with current understanding or practice, and by promoting participatory-oriented understandings and practices.

In the community music therapy project described in paper 3, we used both direct and indirect approaches to facilitate the participation of the children involved. An example of direct facilitation was how the adults and children involved cooperated to create two performances that were performed for members in the local community. Indirect facilitation was how the children's ideas an experiences were staged as a performance that informed their families, teachers and the principal of the local school about their resources, vulnerabilities and perspectives. By presenting ecologically valid and cooperatively constructed understandings (paper 2), and by reflecting on the affordances and risks of understanding children's restlessness as ADHD, I have also indirectly facilitated reflexivity regarding this issue, that might contribute to increased possibilities beyond this PhD project.

Instead of offering a set definition of what community music therapy *is*, Stige and Aarø (2012) present a *set of qualities* that they see as characteristic for this approach. The acronym PREPARE summarizes these qualities, but also refer to how community music therapy can prepare the individual for becoming a part of the community, and prepare the community for receiving the individual. PREPARE stands for *participatory*, *resource-oriented*, *ecological*, *performative*, *activist*,

reflective and *ethics-driven* (ibid., page 18). I further describe these qualities and use them to reflect on my own findings in paper 3.

The qualities described in the PREPARE acronym seem clear and rather obtainable in writing. However, after several years of working together with children and adults with the goal of promoting a shared understanding and practice built on these qualities, I rather think of these qualities as ideals that can be experienced as real in certain moments. For me, several such moments arose for instance during the children's performances. Whether the children themselves or the other adults involved shared this experience, I can never be sure. Still, I have found this acronym helpful in framing the project and as a tool for communication. As a frame of reference, the ADHD diagnosis has facilitated individual- and problem-oriented understandings, while PREPARE has prompted reflexivity regarding these understandings and stimulated a search for complementary and critical understandings.

2.5 *Children's restlessness* as theoretical concept

The qualities in the PREPARE acronym have inspired me to find a different, broader and more contextualized approach to understanding children's restlessness. Perhaps it is more correct to say that these qualities have made it difficult to fully accept the two concepts I use to describe the focus of this thesis: *children's restlessness*.

The problem with *children's* is that it gives children the ownership of the problem, just like in the ADHD diagnosis. I have dealt with this through emphasising the importance of understanding children's restlessness as co-constituted by pointing to the role of adults as co-creators (see conclusion in paper 2). However, in the case of *restlessness as a sign of traumatization* for instance, this feels unethical in the sense that the adult has a far more dominant role than *co-creator*. When adults are violent towards children, they could rather be seen as *sole destructors* that force their own problems onto the child, thereby temporarily or permanently destroying the child's ability to create anything, even a basic sense of coherence and security.

Hannah Arendt, who I have already referred to in this comprehensive summary in relation to action and agency, sees violence as something that can destroy power, but never replace it. She defines power as something that "springs up between men when they act together and vanishes the moment they disperse" (Arendt, 1998, page 200). Power is the *potential to act together* that can occur when people meet, and this understanding is close to the understanding of *participation* that is described in community music therapy. Both the realisation of power (as according to Arendt) and the concept of participation is dependent on what Arendt calls *a space of appearance*. In the space of appearance, people "exist not merely like other living or inanimate things, but make their appearance explicitly" (page 198-99); "I appear to others as others appear to me" (page 198). To be allowed to take part in this process of human existential exchange, is the opposite of being isolated. Violence can destroy this unique human power, and tyranny only works if the tyrant is isolated from the people and people are isolated from each other (Arendt, 1998). In community music therapy, allowing isolated individuals to take part in shared music making, means to facilitate a space of appearance in which the powerful human capacity to act in concert can be realized. In my opinion, this is at the centre of what in community music therapy is referred to as *community*.

My problem with *restlessness* is also what makes it useful: its lack of precision. This lack of precision can make my research invalid from a post-positivist point of view. However, the action research approach I have chosen for this PhD project fits well with my intention of contributing to ecologically valid descriptions of children's restlessness as a complex and dynamic phenomenon. In contrast, within the frame of the ADHD diagnosis, *restlessness* is presented as a certain behaviour that is experienced and understood by the observing adult as *restless*. By approaching the human being with a focus on behaviour, the researcher can avoid the problem of trying to measure or understand the dynamic complexity of human experience or meaning. In research or practice that use the ADHD diagnosis as a frame of reference, adults can measure and treat the child's behaviour without even consulting the child or asking them about their experience.

However, *restlessness* can also refer to a shared or personal experience and thus contribute to a process of meaning making. This is closer to the approach I have tried to take in this project. Still, *restlessness* refers to a problem and not a resource. This problem-oriented approach can be useful as it allows for the identification of individual problems, problems with group dynamics, or problems in the communities and cultures children live in. A focus on problems can thus facilitate the creation of spaces for musicking and promote social change. The need to find a concept that can describe the dynamics of interaction, but that is more neutral or positive than *restlessness* has at times led me to use *vitality* and *creativity*. During the community music therapy project the students and I used words like *activated* and *eager*. Still, it is difficult to find a concept that easily describes the co-constituted potential space for powerful human interaction that can result in what can be observed as restless behaviours or experienced as restlessness, and that also can separate restlessness that stems from such powerful interaction from the restlessness that stems from isolation and violence.

3. Literature review

I have now presented the theoretical framework for this thesis. First, I have discussed the fact that there are different approaches to theory, and I have described critical realism as a philosophy of science that has allowed me to integrate findings from post-positivistic research on children's restlessness that fits with a biopsychosocial model, with critical perspectives that belongs to the tradition of social constructionism. By purposively sampling a wide range of research based on a biopsychosocial model, I have outlined and reflected on some possible biological, psychological and social mechanism that contribute to children's restlessness. I have also presented an ecological systems model of development and a community music therapy approach to children's restlessness.

I will now present a critical interpretive literature review, in which I explore and reflect on how children's restlessness has been described, understood and handled over the last decades in different geographical regions within the field of music therapy.

3.1 Focus and critical approach

The PhD project described in this thesis is cross-disciplinary, but my main affiliation during this time has been with a music therapy research group. With this thesis I wish to contribute to the field of music therapy research, and specifically to music therapy research with or on "normal" children that are perceived as restless. As ADHD is a globally recognised concept, and because the body of research that refers to post-positivistic evidence is substantial also within music therapy, I chose to carry out a literature review on ADHD and restlessness in music therapy.

The results contain research that is closely related to, or critical of, a diagnostic or individual- and problem-oriented understanding of children's restlessness. I did not include resource-oriented terms like *vitality* or *creativity* in the search strategy. This means I have missed out on research on or with children that could have informed a

broader and more resource-centred understanding. However, my review strategy allows me to reflect on the ecological situatedness of music therapy, for instance the *relation between* music therapy research and mainstream research on children's restlessness. The terms *ADHD* and *restlessness* arguably span the traditions of post-positivism, social constructionism and critical realism, as well as the fields of research and practice within music therapy, psychology, medicine and education.

Another limitation of this literature review is that it it focused on music therapy, and does not include literature from other fields. I have included perspectives and research on children's restlessness from other fields in this thesis. As my approach is so broad, it would have been an overwhelming effort to include all relevant literature. I therefore chose to keep this literature review within the field of music therapy. In the discussion section of this comprehensive summary, I reflect on the findings in a broader context.

The purpose of this literature review is to critically investigate how children's restlessness and the externalised symptoms listed in the ADHD diagnosis have been described and understood in music therapy. I chose to focus on externalized restlessness as this is more easily observable, and because it is arguably understood as a cultural and contextual problem – more so than internalised restlessness. This was a pragmatic decision, and does not reflect my understanding of children's restlessness. However, by focusing on external expression of restlessness, I wished to illuminate how "children who are restless" and "restless behaviour" have traditionally been understood and met in music therapy.

3.2 Search strategy and result

This literature search was performed during the summer of 2015, and my goal was to provide an overview of how children's externalised restless behaviours have been described in music therapy research. In order to capture the breadth of the term but still keep it close to ADHD, I chose to carry out a very wide search using the term *restlessness* and the externalised symptoms of ADHD, like *hyperactivity* and

impulsivity. In order to capture a broad range of music therapy research, I also used music* as a search word in addition to the narrower music therapy. I performed a qualitative literature search inspired by the method of Ogawa & Malen as described by Randolph (2009). I search the databases PsychINFO, MEDLINE, Ovid Nursing, Web of Science, ERIC, RILM and ERIC SU using search words related to music therapy and to symptoms of restlessness (see Table 1 in Appendix).

I then performed a supplementary search (see Table 2 in Appendix), and carried out a first round of exclusion based on the following exclusion criteria: children over 12 years, children under 12 years who were not diagnosed with ADHD or described as hyperactive or impulsive. I chose to exclude literature that focused on learning and attention, rather than on restless behaviours. I included literature where children were diagnosed with other disorders in addition to ADHD, as multiple diagnoses is common in this population and can indicate severity of problems (August, Realmuto, MacDonald, Nugent, & Crosby, 1996). I also included studies where some of the subjects were over 12 years old if the subjects studied also included children under 12. I excluded literature written in other languages than Norwegian, Swedish, Danish and English, and literature that was not available online or through the library. The second round of exclusion was performed after a closer examination of the included literature. In order to relate the results closer to music therapy, I chose to only include literature written by music therapists or literature that was published in music therapy publications.

In analysing the results, I have been inspired by a critical interpretive synthesis approach as described by McFerran, Hense, Medcalf, Murphy & Fairchild (2016). This approach outlines a systematic and recursive methodology for approaching, gathering, interrogating and synthesising relevant literature. It has allowed me to reflect on my own intuitive or emotional reactions to the literature I have found. It has also made me curious about the contextual and historical aspects of music therapy research, for instance how understandings have been shaped by local problems and needs, but also by global epistemological and political trends or events.

As described by McFerran, Hense, Medcalf, Murphy & Fairchild (2016), I sorted the results in relation to year of publication, geographical region, type of publication and with an attention to how restlessness was described as problem, resource and in terms of aims of the therapy. I also noted my own emotional reactions when reading the literature. McFerran and colleagues (2016) point out the usefulness of emotional reactions during the analytical process: irritation can be a sign of overly narrow categories, anger can be sign that one's own position is being challenged, shame can be a sign that one is forcing one's own assumptions onto the data, boredom can be a sign that one needs to step away from the data, and confusion can be a sign of naivety that calls for reorientation and a deeper understanding of the process.

The final inclusion of literature contained 26 publications published between 1975 and 2014 by researchers working in Europe (Finland, Norway, Denmark, Austria and UK), North America (USA and Canada), Australasia (Australia and New Zealand), and East Asia (South Korea). I ended up with the following overview: in North America there were 13 publications published between 1975 and 2011, in Australasia there were 7 publications published between 2002 and 2009, in East Asia there was one publication from 2010, and in Europe there were 5 publications published between 2004 and 2014. I will now give a chronological and contextualised summary of this final selection of literature. It is worth mentioning that one paper from South Africa (Dos Santos, 2003) would have been included if it had been available. Unfortunately, I did not manage this, despite my efforts to contact the author online.

3.2.1 Children's restlessness in music therapy in North America (USA and Canada)

The first publication (Williams, 1975) is a program description, in which the author describes 15 ways in which music therapy can be particularly helpful for the growing number of children with special needs. Williams argues that educators particularly need to "listen sensitively to the full and comprehensive message of music" (page 55) and underlines the central place music should have in education. He describes how music therapy can provide us with better "engineers, scientists and social workers" (page 55), but also how it can facilitate "insightful self-motivation and emotional

integration and poise to countless children and youth once harassed by emotional, physical, interpersonal and situational crisis" (page 55). In relation to restlessness, he describes how music has an important function for hyperactive children in that it can help them relax their over-tense bodies and minds.

The second publication (Steele, Vaughan, & Dolan, 1976) is also a program description in which *The Music Therapy School Support Program* is outlined. The program offers services to schools that are concerned about "the normal child who deviates from expected learning (academic) and behavioural (social) patterns, as well as the child who requires special education" (page 87). The aim is to influence more productive behaviour in the hyperactive or hypoactive child, and to provide the classroom teacher with techniques that can translate effectively into the classroom.

The first effect study (McCarty, McElfresh, Rice, & Wilson, 1978) describes how "inappropriate behaviour on the bus decreased with the use of contingent music". Inappropriate bus behaviour is operationalized as fighting (hitting, kicking, pulling hair, spitting, calling names, using profane language or pulling the clothes of another person) and as out-of-seat-behaviour (standing up, sitting on knees, climbing over seats or body parts protruding from the windows). The observing researchers sat in the back of the bus and responded "I cannot talk to you while we are on the bus" if children asked about what the observer was writing. The children were told that the music that they enjoyed listening to, would only be played if they did not fight and remained appropriately in their seats. Their intervention indicates that contingent music significantly affects bus behaviours.

In the second effect study, Wolfe (1982) investigates how continuous music and the contingent interruption of music can affect task performance and movement of two groups of normal and hyperactive third grade students. His results indicate that the intervention had no significant effect on task performance and body movement. Task performance increased significantly with each successive testing, but body movements did not increase in this way. Wolfe describes how there was no significant difference between the normal and hyperactive children in relation to task

performance or bodily movement and there were no significant relationships between task performance and bodily movement.

Then follows three case studies (Aigen, 1991; Herman, 1991; Hibben, 1991) all published in *Case Studies in Music Therapy* (Bruscia, 1991). Aigen describes Will, "a musically and intellectually gifted, non-pathological, eight year-old boy who was brought to therapy for fighting in school" (page 110). Will attends weekly 45-minute sessions at the *Creative Arts Rehabilitation Center*, an out-patient clinic with a client-centred philosophy. During the musical assessment, Will shows a highly developed rhythmic sense, a sophisticated sense of melody and pitch, a strong aesthetic sense, and a strong sense of musical form. This leads the author to describe him as the seemingly "ideal music therapy client" (page 112). Aigen describes how it is "generally counter-therapeutic for therapists to try and control the course and content of the therapy session" (page 113) with clients that have problems with impulse control.

Aigen outlines four phases in the therapy process: *The Beginning: Music, Music, Music*, *A Voyage to Trick Land, The Middle: Where did the Music go?* and *The Ending: A New Beginning for Will.* In *The Beginning: Music, Music, Music* Aigen describes how Will introduces two structures: the organisation of the sessions as musical shows and the use of music to stimulate a fantasy story with a theme of transformation. Will is described as needing to control and orchestrate the music therapist, and Aigen allows this because he sees this as an opportunity for Will to practice impulse control. Will explores the boundaries of the therapy room and seems ambivalent about playing music. Aigen discusses this with his mother, who informs him that Will is taken to an after-school activity each day of the week. He reflects on this intention to care for Will as an unhealthy level of control, that leaves Will frustrated and without the resources needed to control himself.

Aigen describes how he is challenged to break the "vacuum" of the therapy room and discuss Will's intensifying fighting at school with him, after Will's mother requests a meeting with Aigen about this. After discussing with Will, Aigen is left with a feeling

that Will is scapegoated at school, but also that he considers himself a “bad boy”. He wonders if Will is stuck in recreating this image. This leads Aigen to decide to support Will’s emerging transformative tendencies, to facilitate his identification with “good” characters, and allow for expression of his “bad” self. In *A Voyage to Trick Land*, Aigen describes how Will, partly inspired by his ghoulish Halloween costume, improvises a musical story that takes place in Trick Land, where children are transformed into toys by a wizard and a witch. Through musical improvisation and dialogue, Aigen supports and interprets Will story, which builds towards a climax as Will questions whether the wizard and the witch need to bad, and whether little boys and girls can live a good life. The story climaxes when Will repeats, with increasing dramatic urgency, that toys should be turned into children and that nobody should have to live a bad life.

There are many repetitions in Will’s song, but Aigen claims that the music therapist should embrace these as they create security to move forward for the child. Will is later suspended from school after fighting, but shows progress in his ability to feel and express regret, which Aigen sees as an important precursor for change. In *The Middle: Where did the Music go?* Aigen describes Will as having very little interest in making music. The sessions consist of play, games and stories without music. Will stories contain violence, and the therapist joins Will in role play where for instance he is “killed” by Will or has to “kill” him.

Aigen describes this period as especially challenging. Midway through this stage Aigen and Will meet with the mother and her therapist, and despite being extremely resistant, Will uses the opportunity to tell his mother that he feels forced to attend many after-school activities. The meeting ends with a joint musical improvisation which is Will’s prize for attending the meeting. He enjoys this so much that he requests they meet again as a group. Aigen describes it as a rare opportunity for Will to just play with his mother and be a child.

In *The Ending: A New Beginning for Will*, Aigen describes how they meet again after the summer break, and that Will appears more mature and with a rekindled interest

for music. His taste in music has changed from acoustic improvisations to heavy metal, and he demands more autonomy in his playing. Will is also described as more interested in a reciprocal relationship with Aigen. He is still interested in the transformation of evil through violence and death. Wills mother was a patient at the same clinic, and the termination of her own therapy also leads to Will ending his therapy with Aigen. His assessment is that Will has "outgrown and transcended some of the problematic behaviours that plagued him. Not possessing any pathology, but merely the victim of an unfortunate family situation" he is seen as ready to "fruitfully engage life without the benefit of a therapist" (page 122).

The second chapter from *Case Studies in Music Therapy* is written by a Canadian music therapist, Herman (1991), who presents a case study of a nine-year-old boy, Robbie. The case includes descriptions of weekly sessions over a fourteen-month period. Herman describes Robbie as a handsome, wiry, likable little lad who had lived in twelve different foster homes and two treatment centres before being admitted to a children's psychiatric hospital. Robbie is described as unhappy and missing a sense of identity because of the lack of order in his life. He often askes "Who am I?" Robbie considers himself "the boy that nobody wanted". He is described as having no literacy skills, severe learning disability, not able to stay in school, and as having frequent temper tantrums and destructive behaviours, lacking concentration due to his hyperactivity, displaying non-goal directed activities, being disruptive, and as having difficulties being compliant.

Robbie is referred to music therapy as a last resort. Herman combines music with play and creative experiences in the other arts, and describes the therapeutic process in five phases: *The Opening Wedge* (sessions 1 and 2), *Gaining Expressive Freedom* (sessions 3 to 24), *Enjoying Self-Expression* (sessions 25 to 40), *Learning Structure* (sessions 41 to 70) and *Being Himself With Others* (sessions 71 to 120). In *The Opening Wedge*, Herman describes how Robbie explores the room by roaming around, trying all the different instruments. He is clearly motivated, and despite his depression, arrives the next morning bright and eager. They enjoy playing and singing together. However, Robbie makes a mistake and gets up to leave as he says "I

made a friggin Boob and I'm going". Herman responds by looking for "the boob" by crawling on the floor, smacking her lips and flicking her fingers. Her bizarre behaviour stops Robbie in his tracks and he follows her around, asking if she is crazy. Herman declares that "the boob" got away. They end up discussing how Robbie shows his musical skills by being able to identify the mistake, and that "music mistakes" float away and disappear. This becomes a metaphor for their work, and Robbie deliberately makes mistakes, goes through all the emotions and finally declares that yet another "boob" got away.

Herman interprets Robbie's behaviour as a survival mechanism that has helped him cope with his chaotic life-world. *In Gaining Expressive Freedom* Herman describes how music therapy is scheduled to get him out of bed. The first therapeutic goal is to help Robbie sit still and focus his attention on one activity. She encourages him to play with warm water, sponges and floating objects, and provides him with box of sand and combs with different patterns. She supports and comments his exploration with improvised music and with pre-recorded sea music.

In *Enjoying Self Expression* Herman describes how early traumatization has blocked Robbie from playing, and that by making him aware that there were no pre-conceived ideas or rules, he was released from the anxiety of failure. She introduces clay, which has a range of sensuous qualities and textures, can be shaped and reshaped, and that allows for the "erasing" of mistakes. Herman also introduces finger-painting, and describes how Robbie responds to the music in his art activities. If his attention drifts, Herman she uses soft voice, gentle touch and praise to refocus his attention.

In *Learning Structure*, Herman uses a very simple and colourful system of note reading to train Robbie's hand-eye-coordination, concentration, pattern his work habits and increase his motivation. By showing Robbie that he is able to read and play sheet music, she challenges his self-perception of being illiterate. He is very proud of this new skill.

In *Being Himself With Others*, Herman describes how Robbie's increased tolerance for stress and capacity to stay on-task prepares him to socially interact with other

children. Herman introduces a little girl that Robbie likes, and later two other children, and they engage in music games, mime, puppetry and dancing. Robbie develops greater tolerance and improves his social skills. Herman later invites a reading specialist, and together they teach Robbie how to read so he will be able to attend school. Herman describes how Robbie referres to the music therapy room as his "peace room".

The outcomes of the music therapy are described as improved attention span, improved ability to follow directions, decrease in difficult behaviours, improved verbal communication in relation to content and clarity, better social skills, better tolerance for frustration and fewer temper tantrums. Robbie is described as less depressed and that "his self-worth blossomed as his creative energy found alternative ways to construct his personal reality" (page 108).

In the third chapter from *Case Studies in Music Therapy*, Hibben (1991) presents a case description of a group of 6-8 year old children that attend an early elementary special education classroom: Paul, Arnie, Al, Nathaniel, Ken, Michael, Jose, Hattie (the only girl), Tad and Daniel. Many of the children are described as having disruptive behaviours associated with ADHD. Their behaviours "ran the gamut from excessive activity, interruptive talking, and physical aggression to negativism, lethargy, and introversion" (page 177). Their problems span from auditory aphasia, depression, low self-esteem to suicidal ideation. Hibben describes the children in the group as moody, sulky, anxious, hyperactive, defiant, and as deliberately annoying others. She also outlines some of the resources in the group; they are intelligent, humorous, friendly at times, and fond of dancing and playing. Some of the children in the group are medicated with psychostimulant drugs (i.e. Ritalin), and two of the children are medicated with Phenobarbital or anti-depressant medication.

The music therapy is carried out in a very small classroom space for 30 minutes twice a week, resulting in 59 sessions during the school year. Two classroom teachers attend the sessions, both "well-versed in behavioural techniques needed to manage explosive behaviours" (page 178). The teachers use a progressive system of time-outs

for managing inappropriate behaviours, and a star system for rewarding positive behaviours. Music and games were used to identify and contain the children's movements and play. In contrast to their classroom situation, where the children's behaviours were closely monitored and contact between children was discouraged, Hibben encourages the children to experience group play, take risks, tolerate ambiguity, use abstract thinking and share ideas.

Hibben uses a developmental stage theory to frame the children's participation in the music therapy. The stages also indicate expected levels of maturity in relation to behaviours and skills, and serves as a frame for individual evaluation. The group activities are described in relation to interaction, leadership, movement, rules and competency. Hibben outlines three stages in the therapeutic group development process: A *pre-affiliation stage* where the children vacillate between approach and avoidance, a *power and control stage* where children jockey for power and status, and an *intimacy stage* where children begin to practice and try out new behaviours, and where the children's needs become more apparent. Hibben describes how the music helps the group towards better cohesion, through providing both boundaries and inspiration.

The eighth publication (Camilleri, 2000) is a program description of music therapy groups at the REACH Community School in New York. The groups are described as facilitating social-emotional growth and academic success in the face of chaotic family and neighbourhood situations. Goals addressed in these music therapy groups are participation, interaction, relationship formation, communication and expression, space-sharing, problem-solving, self-esteem, respect and awareness. These social and emotional goals are seen as addressing "areas that educators are hopefully working toward in the classroom" (page 189).

The next publication (Nancy A. Jackson, 2003) is a survey of methods used by music therapists to treat elementary school children with ADHD, the perceived efficiency of these methods, and how music therapy treatment relates to other forms of treatment. The results show that music therapists in the US use a variety of methods in the

treatment of children with ADHD, that they often address multiple types of goals, and that treatment outcome is perceived as favourable by the therapist. An overwhelming majority of the children treated with music therapy also receive medication.

The next publication (Sausser & Waller, 2006) is a program description, in which Sausser and Waller outline a model for music therapy with students that have Emotional and Behavioural Disorders (EBD). The model is intended to increase the success of the individual student through combining the music therapy intervention with the 9-week grading period of the school setting. EBD is described as an inability to learn despite normal health and intelligence, to build or maintain relationships, to have appropriate behaviours or feelings, and as general unhappiness and a tendency to be fearful of school. Music is described as a "non-invasive medium that enhances self-expression, self-esteem, motor skills, coordination and socialization" (page 8). The authors describe how "appropriate behavioural interventions such as proximity control, redirection, planned ignoring, pre-set consequences, giving choices and positive reinforcement can be incorporated into the music therapy setting".

The next publications include a PhD thesis (Miller, 2007), and a related program description (Miller, 2011) in which the author outlines a new model of music therapy: bio-guided music therapy. In this approach, physiological data is presented real-time either musically or visually to the client or the therapist, and can be used to treat ADHD. Results from his empirical study (2007) indicates that neuro-feedback with a brain-triggered musical component can be more effective in treating ADHD symptoms, than standard neuro-feedback protocols.

The last publication from North-America (L. F. Gooding, 2011) is a summary of three effect studies in which a total of 45 children participated in music therapy interventions to improve their social skills. The children were diagnosed with a range of disorders: ADHD, dyslexia, Asperger's syndrome, Post-traumatic stress disorder, anxiety disorders, depression, generalized social, conduct and behaviour disorders. A majority of the children are in state custody or foster care, after having experienced physical or sexual abuse, neglect, abandonment and unresolved trauma. Results from

the study indicates significant improvements in social functioning, as rated by the children themselves, their case managers and the researcher.

3.2.2 Children's restlessness in music therapy in Australasia (New Zealand and Australia)

The first publication is a case description from New Zealand (Rickson, 2002), and tells the story of Adam who lives in a special education residential facility where he attends group music therapy. He is a 12-year old Maori boy with a chromosome inversion that makes him very large for his age. He is diagnosed with ADHD, is tested to function within *Moderate Intellectual Deficient* range, and is prone to bouts of verbal and physical aggression. He was born prematurely and had no contact with his mother for the first two months. His mother is described as caring, but as having difficulties with concentration and attention, and both his parents are described as within the lower socio-economic bracket. Adam is also described as a very likable boy with cultural knowledge, mechanical skills and a good sense of humour, who also enjoys riding bikes, music and singing. Results from the music therapy treatment show that Adams positive interactions increased somewhat, and that his negative interactions decreased very much.

The second study (Rickson & Watkins, 2003) is an effect study of fifteen boys with ADHD who are enrolled in a special residential school in New Zealand. The results showed no definite treatment effects, and the music therapy seems to have contributed to more appropriate behaviour in the villa setting, but also to a temporarily mild *increase* in disruptive behaviour in the classroom setting. The authors suggest a more structured program and smaller group numbers for boys with ADHD.

The third study is also by Rickson (2003), and is a case study of John, an 11-12 year old boy, who attends therapy sessions over a 21 month period. John had been removed from his single parent home because his mother was an alcohol and drug addict who had abused and neglected John and his brother, sometimes leaving them alone without food for several days. He is diagnosed with ADHD, Atypical Asperger

Syndrome, Reading Disability, and “probable” Conduct Disorder and lives in a special education facility. He is prescribed with Ritalin, but rejects taking it. His teacher referred him to music therapy because of his artistic talent. However, John’s rejection of music therapy leads the author to question the appropriateness of music therapy for him. Rickson even ends up questioning the philosophical underpinnings of her work and her own skills as a clinician. Rickson describes her orientation as based in humanistic philosophy and in Creative Music Therapy as described by Nordoff & Robbins (1977, in Rickson, 2003).

In response to John’s strong rejection of music, Rickson chooses to move away from Creative Music Therapy and turns to a humanistically oriented psychodynamic approach. Within this tradition, John’s behaviours are understood as defence mechanisms related to the rejection and abuse from his mother. Rickson describes her efforts to contain and tolerate John’s behaviour while staying open and in contact, and how her efforts to match his behaviour reach damaging proportions. Finally, she is able to establish a verbal communication with him during a session in which he reduces a drum stick to a heap of fibre by chewing on it.

John starts telling stories that revolve around a glass flute and three Pitbull Terrier dogs. This becomes the start of a musical interaction with John, and he shows himself as a sensitive musician. Rickson takes him to a flute concert, and at the end of the therapy John auditions for a lead role in the school operetta. He gets the role of Fred, a young boy who through believing in himself becomes a sporting hero. During his performances he offers the audience a genuine smile that grows in response to their applause, and at the end of the night Rickson receives a warm, spontaneous hug from him.

The fourth publication is an effect study, also by Rickson (2006). The study compares the impact of instructional and improvisational music therapy on the level of motor impulsivity in 13 adolescent boys between 11 and 16 years of age. There was no statistically significant difference between the two groups, and this lack of effect is related to the differences in session length, absence of a ‘normal’ control group, and

changes in medication and times of dispensing during the study. However, teachers reported a reduction in a range of ADHD symptoms in the classroom.

The fifth publication is another effect study, this time by the Australian researchers Baker and Jones (2006). They describe a short-term music therapy group intervention involving 31 students with refugee status and minimal English skills. They measured the students' positive and negative classroom behaviours, as evaluated by their classroom teachers. Behaviours were measured at five different time points, and operationalized as *Externalising* and *Internalising behaviours*, *Behaviour Symptom Index*, *School problems*, and *Adaptive skills*. All measures increased during the intervention, and only *Externalising behaviours* showed a significant long-term treatment effect. The findings suggest that music therapy is a viable intervention for managing externalised behaviours in this group.

The sixth publication is a program description of music therapy in special education, authored by Rickson and McFerran (2007). They describe how early research in this field drew heavily on behavioural principles, and that clinical interventions typically follow procedures of referral, assessment, treatment, documentation and evaluation which is in line with the *Individualised Education Program*. Music therapists often help the student obtain goals set by other professionals. The authors point to challenges in evaluating the effect of music therapy in such collaborative models. Rickson and McFerran argue that it is difficult to measure psychodynamic changes and capture musical dialogues with quantitative design.

The authors argue that music therapy has demonstrated efficiency in improving the accuracy of students' responses and in increasing their activity level, and in improving several success-related classroom behaviours (Jellison, 2000, in Rickson & McFerran, 2007). Eclectic music therapy approaches have demonstrated efficiency in children and adolescents with behavioural or developmental disorders, while strict behavioural music therapy interventions show non-significant outcomes (Gold, Voracek, & Wigram, 2004, in Rickson & McFerran, 2007).

Music therapy have extensive and unique applications in special education, but funding is allocated to services implemented by people not qualifies as music therapists (Daveson and Edwards 1998, in Rickson & McFerran, 2007). Rickson and McFerran describe how music therapy seems to be well understood within special education in Australia, but misconceptions still exist and there is a need for relevant information in these settings (Booth, 2004, in Rickson & McFerran, 2007). Music therapy has demonstrated efficiency in improving attention, motivation and hostility in students with emotional, learning and behaviour disorders (Montello & Coons, 1998, in Rickson & McFerran, 2007), in reducing ADHD symptoms (Rickson, 2006, in Rickson & McFerran, 2007), and in providing a highly motivating framework for learning in girls with Rett's syndrome thereby demonstrate that they have an ability to learn (Elefant & Wigram, 2005, in Rickson & McFerran, 2007).

A Cochrane review of music therapy and Autism Spectrum Disorder, demonstrated that music therapy can help children in special education to improve their communication skills (Gold, Wigram & Elefant, 2006, in Rickson & McFerran, 2007). These studies, however, draw on behavioural analysis, and there is a need to better understand the communicative and symbolic meaning of clients' musical materials. Recent advances in the use of meta-analysis have provided important clinically relevant knowledge, but these procedures are described as resource consuming. However, meta-analysis does not describe subtle aspects of a study, or include studies that are not homogenous.

Rickson and McFerran argue that it is important for music therapists to continue explaining and questioning the uniqueness of the music therapy discipline (Gnatt, 2000, in Rickson & McFerran, 2007), and to use methodologies that capture important information. Behaviour analysis can outline behaviours that are traditionally associated with success in the classroom, but such behaviours are not in themselves a measure of a student's success in or outside the classroom (Jellison & Gainer, in Rickson & McFerran, 2007). Rickson and McFerran point out that evidence based approaches are increasingly demanded (Ansdell, Pavlicevic, & Procter, 2004, in Rickson & McFerran, 2007), but they argue that this should not

undermine the importance of qualitative research (Edwards, 2005, In Rickson & McFerran, 2007). The authors point to a need for studies that develop quantitative design in a direction that is clinically relevant, and for more in-depth qualitative design and mixed methods. They argue that such development can help re-establish the balance between qualitative and quantitative research in music therapy.

The last included publication from Australia (K. McFerran, 2009) is a case study of a 12 year old boy, Ben, who is referred for aggressive behaviour in the classroom. Ben is diagnosed with ADHD and a mild intellectual disability. He is medicated with Ritalin, but stops taking medication when his mother feels it affects his learning. His mother recommences Ben's medication after several incidents where Ben is suspended from school because of aggressive behaviour. The school psychologist refers Ben to music therapy because he seems to enjoy creative therapy groups, and because individual music therapy can offer a focused therapeutic relationship. His total 8 months of music therapy – 5 months alone and 3 months with a junior peer also diagnosed with ADHD – included methods like song writing, improvisation, song singing, and working towards the performance of a self-composed song for the school.

McFerran discusses how Ben's unrealistic positive evaluation of his own musical skills initially leads to enthusiastic participation. She describes Ben as vulnerable, and that he demonstrates a need to control the therapist (her) and his junior peer. This develops into a more generous attitude over the course of the therapy. Ben's recommencement of Ritalin seems to induce a more realistic evaluation of his own musical skills, but this also stops him from enjoying and sharing his own recordings. The author discusses the problems of behaviour-focused research and the related lack of focus on children's experiences, quality of life, self-perceptions, moods and their need for empowerment. She also discusses how children like Ben can experience the contrast between free creative expression in music therapy and the structured cognitive work in the classroom as a dramatic juxtaposition of worlds. The author suggests moving away from an external control-perspective on ADHD, and into a paradigm focused on wellness.

3.2.3 Children's restlessness in music therapy in South East Asia

The only publication from this region is from South Korea, and is an effect study of an education-oriented Music Therapy after-school program for elementary school students (Chong & Kim, 2010). The children come from low-income families and were assessed as having emotional and behavioural problems. The intervention lasts 16 weeks, with 50-minute sessions twice a week. The children's social skills, problem behaviours and academic competences were measured, and the intervention was found to have significant positive effects on social skills and problem behaviour, but not on academic competence.

3.2.4 Children's restlessness in music therapy in Europe

The first European study (Gold, Voracek, & Wigram, 2004) is a meta-analysis of the effect of music therapy for children with psychopathology. The study includes 11 studies and a total of 188 subjects. The methods used in the music therapy interventions were classified in relation to theoretical background, for instance psychodynamic, humanistic or behavioural. Methods used were classified as active vs. receptive, and as improvisational vs. structured. The meta-analysis suggests that music therapy has a large to medium positive effect on clinically relevant outcomes for homogeneous groups of children and adolescents with psychopathology.

Effects of music therapy were greater for behavioural or developmental disorders than emotional disorders, and greater for psychodynamic, humanistic or eclectic approaches than for behavioural models. Music therapy had better effect on children's behaviours and development, than on their social skills and self-concept. The authors conclude that children with behavioural, developmental and multiple psychopathologies might especially benefit from eclectic, humanistic or psychodynamic music therapy. They also state that overt behaviours are more easily accessible than subjective experiences, and that measurement errors in relation to capturing children's subjective experiences can artificially deflate the effect on these subjective variables. Gold and colleagues also describe how the effects of music therapy is more enduring when more sessions are provided.

The next publication is a book chapter from the book *Music Therapy in Schools* (Tomlinson, Derrington, & Oldfield, 2012). Achenbach (2012) outlines the development of a Nordoff-Robbins music therapy service at Eskside, a Scottish Children and Families Centre. He describes two cases from this centre. The children that attend music therapy at Eskside are up to five years old, and the site also serves as a placement site for first-year music therapy students. The music therapy groups at Eskside typically consist of three to five children, last up to 25 minutes, and are described as having a clinical focus on the individualised needs of the children. Parents or carers and staff members at Eskside are invited to participate.

Some of the parents have a damaged or strained relationship with their child, and some only see their child at Eskside as the child has been removed from the parental home. Parents (often mothers) who participate might therefore find music therapy difficult. They tend to focus on the negative aspect of their child's behaviour, they get frustrated and angry, and they sometimes remove their child from the music therapy during sessions. These children often appear unusually unresponsive to their parents or display difficult and manipulative behaviours. Students are challenged to sustain and adapt musical improvisation, balance the focus on individual child and group, and to adapt to the dynamics of the group. For instance, in order to refocus a restless group's attention, the students might incorporate more frequent episodes of fast turn-taking.

Achenbach describes two cases, Jill and Sarah, that both need individual music therapy as a break from group music therapy. Jill is diagnosed with Cerebral Palsy and described as anxious and without speech. Through music therapy she is able to tolerate loud or unexpected sounds, and to take part in and even enjoy group music therapy sessions. Sarah is described as having difficult family circumstances, and as struggling with her behaviours and with social interaction. In music therapy she is presented as playing loudly or uncontrolled, and as intolerant of sharing activities with others. Over the course of the music therapy intervention she is increasingly able to share a range of activities with other children.

Two chapters from the anthology *Barn, Musikk, Helse* (Trondalen & Stensæt, 2012) (*Children, Music, Health*) follows. Johns (2012) uses Stern's concept *vitality affects* to describe processes of sharing feelings, intentions and attention. She relates her reflections on these intersubjective processes to her own therapy with children, and shows how spontaneous forms of vitality that arise in the therapeutic situation can help us understand children's life worlds and act as a key to children's health. Johns sees it as important that children are allowed to experience and explore restlessness as a natural and not-threatening dimension of their vital expression.

Hakomäki (2012) describes a collaborative research project with a 14 year-old boy, Nick, who together with Hakomäki reflects on his own therapeutic process between the ages of seven and nine. Hakomäki describes Nick at the beginning of their therapeutic process as longing to die, after having lost his brother in an accident three years earlier. He is restless to the degree that it disturbs his classmates. The music therapy sessions lasted for 45 minutes, once a week over a period of a year and ten months. Hakomäki uses *Storycomposing* as the only therapeutic method. In this method the role of the therapist is to facilitate and support the clients own musical and narrative compositions, without any suggestions, advice, guiding or teaching input. Over these 60 sessions, Nick creates 30 storycompositions. He shares these during performance sessions attended by his family, the music therapist, a family therapist, a child psychiatrist and his little sister's nanny. Five years later, during their retrospective collaborative research, Hakomäki and the boy revisit these storycompositions to prompt reflections about Nick's therapeutic recovery process.

The last publication included in this literature review is by me (Helle-Valle, 2014) and is included in this thesis as paper 1. It is a critical and interdisciplinary reflection on the position of ADHD in the Nordic context. The biopsychosocial concept of ADHD is discussed in the light of historical ontology. ADHD is described as the currently dominating frame for understanding and handling children's restlessness. Rather than claiming that one approach is better than another, I argue that it can be useful to place conflicting or contrasting understandings at different levels of

analysis, and reflect on possibilities and limitations pertaining to these different levels.

3.3 A critical interpretive synthesis of the literature review

3.3.1 Eight critical questions

I will now present my critical evaluation in the shape of eight questions that emerged as I was reading and writing summaries of the included literature. I will also support my reflections by drawing on relevant research.

1. What happens when children's boundaries are violated?

Several of the children in this literature overview had experienced neglect or abuse (Achenbach, 2012; L. F. Gooding, 2011; Herman, 1991; Rickson, 2003; Rickson & Watkins, 2003). Some of the children had refugee status (Baker & Jones, 2006) or were described as having low socioeconomic status (Chong & Kim, 2010; Rickson, 2002). In this case the restlessness described in the included literature could be understood as a communication of suffering, as a functional adaptation to a dysfunctional situation, or as an expression of what it is like to grow up under challenging circumstances. This points to a need to move beyond a behaviourally oriented language, in order to capture the experiences and perspectives of the children, the contextual nature of their restlessness, and to understand restlessness as a specialised skill that promote adaptation.

In other studies, like the study of the effect of contingent music on inappropriate bus behaviour by McCarty and colleagues (1978), the restlessness can be understood as normal child behaviours of moving around, playing, teasing and testing boundaries. Yet another way of conceptualising restlessness is to understand it as a vitality affect that contains information about emotions and relationships. This information is expressed on the level of movement, time, space, intensity and intention, like described by Johns (2012). The importance of language in describing different aspects of restlessness, points to a need for increased linguistic specificity and reflexivity regarding children's restlessness in future research.

2. How does restlessness relate to gender?

An overwhelming majority of the children described in these studies as boys (Aigen, 1991; Hakomäki, 2012; Herman, 1991; Hibben, 1991; K. McFerran, 2009; Rickson, 2002, 2003, 2006; Rickson & Watkins, 2003). Where are all the girls? Their suffering seems to be the "silent ghost" in these data. Perhaps the boys are seen and helped because they become aggressive or more dysfunctional than the girls? Or perhaps ADHD represents a stereotype of how boys deal with and communicate their problems?

A comparison of problems reported by parents from 12 cultures, shows that boys more often than girls are understood as externalising their problems (Crijnen, Achenbach, & Verhulst, 1997). This study also points to geographical differences, for instance: Swedish parents report their children as less problematic overall, than parents in China. Parents in samples from Australia and USA have scores in-between these extremes. The results from the literature review presented in this comprehensive summary, show that a majority of the music therapists are female. This echoes the finding from research on ADHD, in which ADHD is seen as the mother's project (Olsvold, 2012; Ilina Singh, 2004) and the majority of the restless children are boys (Novik et al., 2006).

3. Can research approaches be seen as an expression of culture?

A broad range of theoretical and practical approaches are represented in the literature described in this review. However, there seems to be geographical or cultural variations in relation to which theories or practical approaches are used. For instance, there seems to be a tendency to use behaviouristic and diagnostic approaches in North America, Australia, New Zealand and East-Asia, and a more critical and collaborative approach in Europe. This said, there are exceptions to this rule, for instance McFerran and Rickson's (2007) reflections on music therapy research and practice in the context of special education in Australia, and McFerran's (2009) discussion of the benefits and limitations of a behavioural approach in music therapy research on ADHD, the need to investigate power issues, and the need for a paradigm shift from an "external control perspective" to a focus on wellness in this population.

4. Where has the focus on system and system change gone?

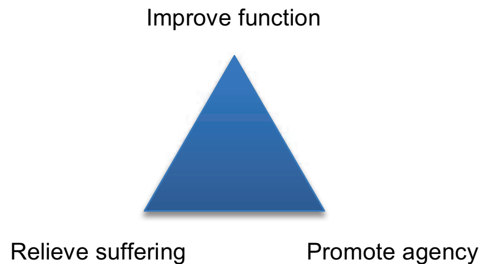
The therapeutic interventions are most often focused on improving the individual child's function or facilitating individual resources, even in the publications that outline the importance of the wider ecological context, like the impact of chaotic family situations and neighbourhoods (Camilleri, 2000). There is a relative lack of effort directed at changing the surrounding ecological systems. There is also a relative lack of descriptions regarding the systemic, societal or political aspects of restlessness. However, this might reflect the selection criteria used: the literature search strategy includes terms that depart from a biomedical and individual-focused model of health. Still, it is interesting that research on ADHD and restlessness so seldom entail reflections on politics, children's rights, social equity or social change. Some studies include performances outside the therapy room, for instance Aigen's case study where Will performs for and improvises with his mother and her therapist, or Rickson's case study where John auditions for and performs in the school musical.

5. What are the implicit goals?

Judging by the descriptions in the literature, it seems that the children are understood in roughly three ways: a) as individuals that can be observed from the outside and that can be influenced to realise their social or academic skills, b) as vulnerable and marginalised individuals in crisis that can be understood and helped through shared experience, and c) as partners that should be regarded as competent in creating the frames for their own recovery. I would place most of the behaviour-focused studies (Baker & Jones, 2006; Chong & Kim, 2010; Lori F. Gooding, 2011; Hibben, 1991; McCarty et al., 1978; Rickson, 2006; Rickson & Watkins, 2003; Sausser & Waller, 2006; Steele et al., 1976; Wolfe, 1982) in the first category, many of the case descriptions (Achenbach, 2012; Herman, 1991; K. McFerran, 2009; Rickson, 2002, 2003) in the second category, and perhaps only three studies (Aigen, 1991; Hakomäki, 2012; Johns, 2012) in the third category.

These categories are not absolute, and could better be understood as three connected corners of a triangle:

Figure 1: Implicit goals of music therapy



The studies could be placed within this triangle, for instance, several of the authors of the case studies both describe efforts to relieve suffering and to promote social and academic skills, like Herman's focus on teaching literacy skills to "the boy nobody wanted", Aigen's and McFerran's focus on decreasing aggressive behaviour in the classroom, Rickson's efforts to promote normal social function in "the boy with the glass flute". Also, although Aigen, Johns and Hakomäki seem interested in giving the child great freedom and including them as cooperative partners, they also support the child towards improved function and symptom relief.

One could imagine that these three corners are perceived differently depending on the perspective taken. They can be viewed in relation to contextual, cultural or societal demands and affordances, in relation to therapist intentions or experiences, and in relation to the children own holistic or embodied experiences and intentions. To complicate the use of this simple triangle even further, it is possible to place the case studies in a more dynamic way by looking at the different phases of therapy or by investigating how the relational micro processes within these phases change from minute to minute. In the research presented here where the therapist seems to be informed by a curiosity towards the child's experiences (Achenbach, 2012; Aigen, 1991; Hakomäki, 2012; Herman, 1991; Hibben, 1991; Johns, 2012; K. McFerran, 2009; Rickson, 2002, 2003), musical interactions seem to create a "crack" in the cemented behaviours and relational experiences, that arguably keep the child from developing and exploring.

6. How is theoretical orientation related to therapeutic action?

As an extension to the previous point, it seems that the children more often are regarded as co-creators when authors use a humanistic (Rickson, 2002), psychodynamic (Aigen, 1991), eclectic (Johns, 2012; K. McFerran, 2009; Rickson, 2003) or collaborative (Hakomäki, 2012) approach. Despite this emphasis on cooperation with the child, hereunder the descriptions of the children as co-creators of their own problems and recovery from these, there seems to be a lack of formalization or systematisation in this empowerment process. By this I for instance refer to the fact that the children do not seem to be routinely asked if they understand why they are in music therapy, what they perceive to be the problem, what their own goals for the therapy are and how they experience the therapy. Rather, the children's contributions through fantastical stories or improvised music seem to create the platform from which a collaboration emerges. The relative lack of verbal information and co-reflection, and the emphasis on interaction through music and play, could be understood in relation to the theoretical conceptualisation of music as a form of communication that might be seen as equal to or above verbal communication.

7. Where does the restlessness come from?

The restlessness displayed by the children in the case studies and those included in the surveys and experimental studies, can be understood in relation to the diagnosis they have or in relation to the situation they live in. Many of the children in the case studies have several diagnoses. The children included in the surveys or experiments are not presented with diagnosis. The information we get about the children included therefore partly depends on the methods used by the researchers. There are few descriptions of how music therapy itself can be a source of restlessness.

Apart from McFerran's (2009) case study of Ben, there are few descriptions of how medication interacts with music therapy. The survey by Jackson (2003) shows that an overwhelming majority of the children diagnosed with ADHD that attend music therapy in the US are treated with medication. For instance Methylphenidate, often sold under the name Ritalin, has the common side-effects of insomnia, stomachache, headache and anorexia (Morton & Stockton, 2000). Despite the strong effects of

central stimulants on restlessness, it is not impossible to image that restlessness can stem from interactions between (side-)effects of the medication and the music therapy intervention itself. Also, these children might bring with them experiences that stem from interactions between challenging factors on several levels within their ecological systems. For instance their own level of maturation, experiences of neglect and abuse over time, a limited access to resources because of socio economic status, stereotypes in their communities, and the lack of political or professional recognition of their perspectives and complex life situations.

There seems to be little reflection of the possible side-effects of music therapy in the studies presented. Several of the authors, for instance Herman (1991), Hibben (1991) Rickson (2002, 2003) describe how music therapy is not only pleasant, but also includes situations where tolerance levels for noise or social interaction are challenged with the aim of increasing the child's tolerance levels.

8. Can restlessness be seen as inter-contextual tension?

Some of the music therapy researchers write about the tension between therapy and "the outside world". For instance McFerran (2009) gives some cautionary reflections of empowerment and ADHD. On page 81 to 82, she writes:

> *(…) the young man's behaviour on return to the classroom did begin to deteriorate in the second term of the music therapy intervention. This was communicated to the music therapist and strategies were put in place to resolve the situation. An extended closure activity was incorporated into sessions that involved sitting and listening to music while discussion the session and considering the imminent departure. The session time was also adjusted so that the young man did not return to the quiet and highly structured classroom environment, but finished the session before the recess break. In this way he was able to transition more easily back to the classroom, and staff noted that the situation resolved itself. The movement between the two contrasting worlds of free expression and structured cognitive work was clearly a dramatic juxtaposition.*

This tension between music therapy and classroom setting can also be found in Rickson and Watkin's study from 2003, where the music therapy led to improved behaviour in the freely structured villa setting, but to more difficult and disruptive behaviour in the highly structured and behaviour-focused classroom setting. This might indicate that the interactions and expressive freedom facilitated by music therapists using a humanistic, psychodynamic or eclectic approach can create challenges for the children and temporarily entrap them in a sort of inter-contextual tension. This indicates a need for systemic change that supports the therapeutic processes that are initiated in the music therapy setting, or at least like McFerran suggests an awareness about facilitating such transitions to minimize the strain on the child.

4. Aims and research questions

I have now presented a critical interpretive literature review of relevant literature within the field of music therapy. I have summarized the results in relation to historical time and geographical region of publication. I have critically reflected on the results of the review in the shape of eight critical questions. I will now present the aim and the three research questions that have structured this thesis.

The aim of this thesis is to contribute to reflexivity in relation to children's restlessness in general, and in relation to children's restlessness in music therapy in particular.

The research questions have been inspired by the results of the critical interpretive literature review. The results from the review can be used to argue in favour of a bioecological conceptualisation of children's restlessness. Both the children's restlessness and the adults' understandings of these, can be understood as a product of interactions within and between the adults' own ecological systems and the ecological systems of the children. For instance, the descriptions of restlessness presented in this literature can be seen as constituted from adult *theories* about children's restlessness, and from *observed events* of restlessness in the *contexts* in which music therapy takes place. These observed events, the contexts in which they take place, and the descriptions and explanations included, have developed over time; personal time, family time and historical time.

The results point to the importance of exploring children's restlessness as a complex multi-level relational phenomenon. With this in mind, I have found it relevant to explore how an ecological systems model can be relevant when understanding children's restlessness. Rather than being a constant phenomenon that appears in the same way across time and contexts, children's restlessness can be understood as the result of relational interactions between many ecological levels and contexts. These relational interactions point to the importance of understanding both children and adults as subjects acting on each other.

The main research question of this thesis is:

1. *How can children's restlessness be understood as a bioecological phenomenon?*

The secondary research questions are:

2. *How can adults' understandings of children's restlessness be seen as result of interactions between process, person, context and time?*
3. *How can we understand children's restlessness on the premise that children and adults are participating subjects acting on each other?*

5. Methodology

I have now presented one main research question and two secondary research questions that have shaped this thesis. I will first describe hermeneutics and reflexivity, and discuss why this is important in relation to children's restlessness in general and ADHD in particular. I will then give a short description of action research, and describe the action research approach taken in this study. I will give a short description of the context of the study, and thereafter discuss the relationship between action and reflection within the cooperative inquiry group and the community music therapy project. I will then describe the methods I have used for collecting and analysing data.

5.1 Hermeneutics and reflexivity

Hermeneutics and reflexivity can be seen as both separate and closely interrelated approaches to understanding. In one way, Reflexivity is central part of the hermeneutic process that allows for a dynamic interplay between parts and whole, preunderstanding and understanding. In a different way, hermeneutics represents a tradition of inquiry, and reflexivity entails reflecting on understandings as pertaining to certain traditions of inquiry. In this thesis, I reflect on three philosophies of science; post-positivistivism, social constructionism and critical realism, and how these traditions can afford different ways of understanding children's restlessness. However, I will in this section present hermeneutics as a *way of thinking* that values a plurality of interpretations, and as a *space for thinking* that can bring inspiration from the collision of different understandings through reflexivity.

5.1.1 Hermeneutics

The interpretation of text is the point of departure for hermeneutics, and so the process of understanding a part of a text in relation to the whole text has been a main theme since the very beginning. In this thesis, however, I will focus on the

relationship between preunderstanding and understanding, or *alethic hermeneutics* (Alvesson & Sköldberg, 2009). The word alethic is derived from Greek *aletheia*, and refers to the process of uncovering something hidden. Alethic hermeneutics consists of three related sub-fields, *existential hermeneutics* with central philosophers Heidegger and Gadamer, *poetic hermeneutics* inspired by Heidegger and developed by Ricoer and others, and *the hermeneutics of suspicion* represented particularly by Marx, Freud and Nietzsche. For the purpose of this thesis I will not go further into these sub-fields, but concentrate on presenting some central features of alethic hermeneutics.

Understanding is assumed to be basic to human existence, and as human beings we constantly keep orienting ourselves as a means of survival (Alvesson & Sköldberg, 2009). This is particularly true for children who are born with an incredible capacity to learn and who depend on their care-givers and environments for survival and development. Both adults and children understand from the position of being part of a particular, historically and culturally conditioned, ever-changing world. In the context of research, this means that researchers' practices are permeated by theory and temporality (Heelan, 1998). In the field of music, health and well-being, the standardised instruments used for measuring these entities, often downplay their temporally variable and situationally emergent nature (DeNora, 2013).

The assumption that understanding is basic to all forms of life, and the premise that all science practices are laden with theory and temporality arguably dissolve the boundary between natural and cultural sciences. Some hermeneutic thinkers argue for the retention of dualism between natural and cultural sciences, as cultural science (unlike the natural sciences) are focused on self-understanding (Alvesson & Sköldberg, 2009). Thus, some alethic hermeneuticians underline the similarity between natural and cultural sciences, while others underline the differences. However, all those belonging to alethic hermeneutics agree that both natural and cultural sciences are affected by theoretical preconceptions, and by processes of interpretation all the way down to the level of data.

Alethic hermeneutics dissolves the polarity between subject and object by introducing a disclosive structure: the revelation of something hidden. For existential hermeneutics the intention is to disclose structures or properties basic to human existence that have been forgotten. For poetic hermeneutics the intention is to disclose an underlying narrative. For the hermeneutics of suspicion, the intention is to disclose something shameful, like hidden or repressed economic interest, sexuality or power (Alvesson & Sköldberg, 2009).

5.1.2 Reflexivity

Reflexivity is based on the assumption that all measurements, for instance observations, statements of interview subjects, or statistics, are the *results of interpretations* (Alvesson & Sköldberg, 2009). Reflexivity puts interpretation at the forefront of the research work. Doing reflexive research means exploring the complex relationship between processes of knowledge production, the various contexts of such processes, and the involvement of the knowledge producer. In the context of empirical research, reflection can be defined as *interpretation of interpretation* (ibid.).

Reflective and reflexive empirical research are in many ways synonyms, but Alvesson and Sköldberg (2009) argue that reflexivity is a specific form of reflective research that involves reflection on several levels or directed at several themes. To them, interpretation is fundamental to reflexive research in that (page 9):

> *(…) serious attention is paid to the way different kinds of linguistic, social, political and theoretical elements are woven together in the process of knowledge development, during which empirical material is constructed, interpreted and written.*

Reflexivity in this thesis

In this thesis, I reflect on how linguistic, social, political and theoretical elements are woven together to form descriptions about children's restlessness. Paper 1 is a theoretical paper in which I reflect on some linguistic, social, political and theoretical elements of ADHD and the biopsychosocial model. Paper 2 and 3 are empirical papers. In paper 2 I interpret the interpretations of adults from one particular context.

In paper 3 I reflect on interpretations made by two music therapy students and myself during and after a community music therapy project. I also include interpretations made by other adults in this context, and the children themselves.

In this thesis, I also reflect on children's restlessness as forms of vitality (Stern, 2010) and as action (Arendt, 1998). In my reflexive exploration of children's restlessness, I have been interested in how adults create demarcations, how this process revolves around the adult, and how it positions the child that is understood as restless. I have chosen to use reflexivity not only as an intellectual tool, but as a lived process. This has enabled me to reflect on connections between my own meaning making processes, my own values, the research I have read, and the situations I have observed and participated in. Similarly, I have let the research and my experiences from practice influence my meaning making process and my theoretical conceptualisation of children's restlessness. I illustrate this dynamic process in the beginning of this thesis.

It is fair to say that I have immersed myself in this project not only as a researcher, but as a human being. For instance, remembering that I have been a child myself, and connecting with the fact that I am a mother, has helped me maintain my curiosity about children's inner worlds and their perspectives. These are also central processes when taking a *child perspective*, as described by Sommer, Samuelsson and Hundeide (2010). A child perspective "directs adult's attention towards an understanding of children's perceptions, experiences, and actions in the world" (Sommer, Samuelsson & Hundeide, 2010, page 22). Taking a child perspective is understood as opposite to objectifying children. Reflexivity and taking a child perspective can thus counteract processes of objectification facilitated by for instance an ADHD diagnosis. One example of such processes in this thesis, is the discussion of how getting to know the children through musical collaboration counteracted distance and a negative focus on the individual (paper 3).

Reflexivity against doing harm to children

In paper 1, I reflect on how children's restlessness is understood by adults, and how ADHD is a dominating perspective in Norwegian clinical-political authorities. In this paper I use reflexivity as a tool for concept analysis, and point to the potential discrepancy between research aims and methods. For instance, research on ADHD is not only relevant in terms of understanding children's restlessness as symptoms and function. Norwegian clinical-political authorities also encourage adults to focus on the children that *benefit from medication* (paper 1).

Should we focus on those who benefit from taking medication, or should we focus on the children that do not benefit from taking medication? Perhaps we should increase our knowledge about what medication does to children, and increase our reflexivity regarding bioecological benefits and risks for the child. This means looking at the person, but also at relevant processes in the child's ecological systems, qualities in these different ecological contexts, and at how these develop and interact over time.

The ancient dictum of medical ethics, *primum non nocere,* can be translated as *first do no harm*. This dictum refers to the ethical principle that commonly in medical treatment *harm* in the form of risks or discomfort, precede benefits (Martin, 2015). In the case of ADHD, this could mean that one should critically examine whether current research and practice fully recognise the psychological or physiological discomfort that comes from taking central stimulants. There should also be critical investigations into the processes of how adults overlook, misinterpret and accept adverse effects of central stimulants on behalf of children, due to the strong emphasis on behavioural or academic benefits. Such investigations should also examine similar processes in child-rearing practices, education and non-pharmacological therapies, hereunder music therapy.

Primum non nocere is not a common dictum in psychology or in music therapy. However, this ethical principle of primarily avoiding harm can challenge the focus on therapy as affecting change or creating new possibilities for action for the individual or in the context. Unpredictability and cooperation can be seen as innate to human

action (Arendt, 1998). Perhaps parents, teachers and therapists should be less eager to initiate change in the face of unpredictability, and rather take a more cooperative stance? Or perhaps we as adults should pay more attention to the contexts in which children act? Through facilitating better context for children's participation, we can make their unpredictable actions more functional. One example of this is how unpredictability is a central feature of improvisation, either in a musical context or in play. Better contexts would mean that others in the same context more often could complete children's initiatives with enthusiasm and understanding.

The principle of not doing harm could also apply to politicians, researchers, teachers and parents and create new foci for reflection in the ecological systems that surround the child. However, a shift in focus from improving children's function and symptoms to not doing harm, can also create new challenges. Should children only participate in highly structured therapies in order to for instance avoid (re-) traumatisation? According to Arendt (1998), we reveal something about ourselves when we act. Does this mean that vulnerable 'restless children' should be kept from participating in the wider community as a form of protection?

Reflexivity against narrow understandings

Both social constructionism and critical realism acknowledges the the mutual co-constituting nature of human biology and the social world. Pioneers of social constructionism Berger and Luckman understood the human organism as a 'biological substratum' that sets limits to an individual's sociality, for instance through our need to feed and the fact that we die. Simultaneously they pointed to the fact that the social world also sets limits to an individual's biology, for instance via the availability of food, and in relation to how and when we die (Alvesson & Sköldberg, 2009).

ADHD is an interesting social construction in this sense: Both the ADHD diagnosis and mainstream research on ADHD describe how ADHD is a biological phenomenon that strongly limits the individuals' ability to succeed in the social world. Simultaneously, mainstream research on ADHD often minimizes the descriptions of

how the social world limits the biology of the individual child. From a social constructionist perspective, ADHD emphasizes the effect of biology on an individual's ability to participate in the social world, and minimizes the effect of the social world in constructing this condition. In this sense, ADHD should be seen as more than a diagnosis; it could be understood as an attempt to direct our attention and understanding away from the limits put by the social world on the individual's biology.

In relation to children's restlessness in general, and to research on ADHD in particular, reflexivity is an important and powerful tool that can challenge tendencies to overlook social mechanisms. Reflexivity is important in relation to both theoretical assumptions (ideas) and common-sense (knowledge), and can allow for fruitful exchanges between these.

5.2 Action research

Action research can be described as a *family of approaches* or as an *orientation towards inquiry*, rather than a specific methodology (Reason & Bradbury, 2006). In action research the aim is to create a quality of engagement, curiosity, and of question-posing through gathering evidence and testing practices. Action research serves three important purposes: to bring an action dimension back to the overly quietist tradition of knowledge generation, to expand the expert or elitist hold over knowledge, and to contribute to the revision of the currently dominating worldview that can be described as based on a positivist philosophy and informed by a value system dominated by economic progress (ibid.).

I have chosen to do an action research project because it supports a participatory worldview, facilitates collaborative reflexivity, and allows for a critical exploration of current practices and understandings related to children's restlessness. I will now outline how an action research has shaped the project described in this thesis by drawing on five bullet points from Reason and Bradbury's Handbook of Action Research (2006, page xxii): responding to practical issues in people's lives, engaging

with people in collaborative relationships, drawing on many ways of knowing, value-oriented research, and action research as a living, emergent process.

5.2.1 An action research approach to children's restlessness

Responding to practical issues in people's lives

An action research approach has allowed me to respond to the practical and pressing issue of how we as a society understand and handle children's restlessness. This process is complex, but a very concrete issue is the increased use of the ADHD diagnosis and central stimulants during the past decades. In this project I have reflected on how children's restlessness is handled on a societal level (paper 1), children's restlessness as a pressing issue in a local community, in the health system, in the pedagogical system, in child welfare, in kindergarten and at home (paper 2), and as an issue to be dealt with during community music therapy (paper 3).

Engaging with people in collaborative relationships

Through cooperative inquiry (Heron & Reason, 2001) I was able to engage with people that daily faced the challenges of children's restless behaviours, like parents, music therapists, psychologists, kindergarten staff, health personnel and case workers in child welfare (paper 2). My experience was that these people felt strongly about their work and the children they worked with, that they often had a wide understanding of normality, but worried about abnormality, and that they were interested in reflection, but depended on practical solutions that worked in their everyday context. Together we were able to open a communicative space that stimulated dialogue, inspired change, and gave insight to aspects of current practice and understanding that hindered change.

A central aspect of the community music therapy project, was also to facilitate collaborative relationships between adults and children, and between children. By directly engaging with the children, and by observing the collaborative relationships created amongst them, I was able to develop an understanding of restlessness as process and relation. Interestingly, by engaging directly in collaborative relationships

with the children I became more empathic towards them, but it also enabled me to experience some of the challenges of dealing with children's restlessness in practice.

Drawing on many ways of knowing

In this project I have looked at restlessness from many perspectives and tried to understand what these different perspectives can contribute with. During the cooperative inquiry group discussions (paper 2), we discussed current research on children's restlessness, and reflected on our own experiences and contributions to children's restlessness. During the community music therapy project (paper 3), both the children's and the adults' bodily movements, song and playing, revealed something about us and enabled us to create and collaborate beyond verbal conversation. During my interviews with the children, many of them created drawings as we talked together. These informed and deepened my understandings of them and their experiences.

I also drew on several ways of knowing in relation to dissemination. I have for instance presented my reflections and findings in the shape of a mirror that I drew on to illustrate subjectivity and the contextual nature of knowledge, a Lego-model that I built to illustrate an ecological system's perspective, and I have had children from the project join me with their music and dance-performances during presentations. Exploring different materials and forms of communication, and presenting in playful ways, has been guided by the intention to include many ways of understanding and representing restlessness, playfulness, vitality and creativity.

Value-oriented research

Action research is strongly value-oriented, and researchers that choose to do action research projects are concerned with the flourishing of human persons, their communities, and the wider ecology in which we participate (Reason & Bradbury, 2006). This has very much been the crux of my PhD project, and an ideal that has inspired and motivated my work during these past five years. As *ideals* these values are easy to agree with, but as ideals are translated into action, the unpredictability and co-created nature of actions can sometimes lead to contexts that are at odds with these

ideals. To me this really illustrates the complexity in this field of research, and point to the distance between theoretical ideals and real-life actions or practice.

According to Hannah Arendt (1998), the very nature of action is unpredictable and an action represents a beginning that must be completed by the community. Through acting and speaking both adults and children reveal something about who they are. The values informing this project is that children should be allowed the freedom to express who they are, and that adults should help complete children's actions with an emphasis on community, sustainability, forgiveness, trust and love. In contrast, the diagnostic descriptions of symptoms and function listed in the ADHD diagnosis implicitly emphasise obedience, predictability and productivity. The unpredictable nature that can be understood as innate to action itself, is in the ADHD diagnosis understood as a problem and a quality of the child's neurophysiology. The restlessness is presented as unwanted, and as a potential threat to the community in terms of disobedience, unpredictability and unproductivity.

Action research as a living, emergent process

The action research process should be understood as a living, emergent process that changes and develops as those engaged deepen their understanding and develop their capacity as co-inquiries individually and collectively (Reason & Bradbury, 2006). In this project this dynamic form created both tension, unrest, curiosity and motivation in both the adults and children that were engaged in the practice field. I write about this in the paper 3, and I describe this dynamic development and how we handled it collaboratively under 5.2.3. The community music therapy project described in paper 3, represents perhaps the most intense and dynamic phase of the research project.

5.2.2 Context of the study

My approach to children's restlessness has been both broad, retrospective, and oriented towards the here-and now. The context for this study can thus be described in very broad terms, like the historical development concerning ADHD, child rearing, education, mental health, children's rights, working life, gender equality. The context can also be described with a focus on the immediate context in which my data was

collected. I have to some extent reflected on the broader context of this study in the introduction, theory, methodology and literature review section of this thesis. In this section, I will focus on the immediate context for data collection.

The kindergarten

The study described in this thesis was carried out in one kindergarten in Norway. The leader of the kindergarten described the kindergarten staff as experienced, motivated and stable in terms of staff replacement. However, they also struggled with increased demands in terms of both quantity and quality. These challenges included a lack of resources in relation to sick leave, children with additional needs, and continued education, a pressure to focus on educational activities and measure developmental progress, as well as buying, preparing, serving, and cleaning up after the children's lunch every day. The leader also described challenges related to the increased number of children in the kindergarten because of lowered demands concerning personal space (square meters per child), the more demanding nature of children growing up today, and the influx of one-year-old children over the past years as these now have the right to attend kindergarten.

The kindergarten was a public kindergarten with four departments; two for children under 0-3 years and two for children 3-6 years. The children came for many different cultural backgrounds. Despite being in a big city, the kindergarten was situated close to nature. The motto of the kindergarten was to focus on play, to contribute to good attitudes and values, and to provide extra support for those with additional needs. The local Educational and Psychological Counselling Service employed a music therapist. The part of town in which the kindergarten was situated, has by the local municipality been described as ranking low in terms of socioeconomic status.

The music therapy space

During the community music therapy project, music sessions were held in a room on the ground floor of the kindergarten. The room had big widows and a lot of natural light. It had a door that could be shut so that noise from other children in the department would not disturb the session. Functionally the room could be separated

into two main spaces. In one end of the room, there was a table with chairs and a kitchenette. This was used during lunch, but the table and chairs were stowed away in a corner during music therapy sessions. In the other half of the room, there was as open floor space. Along the wall stood a series of chest of drawers which had several small chairs stacked on top of them. In the beginning of the project we simply sat on the floor in a circle during the music therapy sessions. Towards the end of the project, as we were starting to prepare for the performance, we would arrange the chairs in a circle so that there would be a clearer separation of audience and performance.

During the two performances these same chairs were used in a semi-circle on-stage. The first performance was held in the room in which the music therapy sessions were held during the project. The relatively small space created a closeness between the audience (the children's families) and the children on-stage, with no less than a meter separating audience and performers. During the performance at the school, the size of the gymnasium created a very different feeling, as the audience (primarily children and teachers) were spread further apart and were sat at a greater distance from the children on-stage. During the performances, the chairs also had a structuring function as the staff or music therapists would remind the children to remain in their chairs during performance, or to go back to their chairs after finishing their piece in the performance.

5.2.3 The relationship between action and reflection in this study

The action research process is characterised by a continuous development of reflection and action. I will now outline the major developments involving action and reflection related to my own engagement with a multidisciplinary practice field, the process of collaboratively creating the community music therapy project, and the process of carrying out a cooperative inquiry.

According to Arendt (1998), expressing oneself through language should be considered a kind of action, but speaking or writing should be seen as a weaker form of action than doing. I base my understanding on this definition of action. In this project, the three papers can be seen as the end products of three related action

processes: 1) A process of practice-informed reflection that circled around my own understanding, but also involved my three supervisors and the co-researchers in the practice field. This process resulted in the paper 1. 2) The cooperative inquiry group that was hosted by one specific kindergarten and involved a total of ten adults from the local environment. This resulted in paper 2. 3) The community music therapy project that involved the staff and children in the same kindergarten, as well as two music therapy students and two music therapists. This resulted in paper 3.

Engaging with a multidisciplinary practice field

During the course of this PhD project, I have sensitized myself to the research field and to the Norwegian practice context. I have done this by reading up on theoretical and empirical literature that thematise children's restlessness from different perspectives, by seeking out relevant information and guidelines published by Norwegian authorities, and by following relevant discussions and reports in the local and national news. The discussions and reports in the news have been varied in content, but has sheared one important feature: they focus on the conditions for children growing up in Norway today. This includes literature about cases of child abuse and neglect, the criminal investigation of child abuse and neglect, child welfare, the coverage of kindergartens, indoor climate in kindergartens, city planning and architecture related to children's needs, structural reasons for the decline in child births in Norway, cultures of mothering and child rearing, sleep, the use of electronic devices and social media in kindergarten and at home, integration, education and poverty, to name a few.

Paper 1, which is a critique of the biopsychosocial model and ADHD as the dominating perspective in current understanding and treatment, was the result of an epistemological investigation of current research on ADHD. This critical reading of research literature led me to contact the National Centre for ADHD, Tourette's Syndrome and Narcolepsy by e-mail about some FAQ answers they had posted on their website. The answer I got from the centre was polite and evidence-centred. The tone seemed aimed at dismissing any worries I would have about central stimulant medications. For instance, they pointed to the lack of evidence of its dangers, and

they also attached a minute from Prime Minister's Questions. In this minute, the increased use of the ADHD diagnosis was related to the National Health plan. It ended with the recommendation that one should focus on the children that benefit from diagnosis and medication.

My reaction to this answer has followed me throughout this PhD project and can best be described as ambivalent: in one way I was confused and discouraged by the response, as it made me doubt my own critical research project. It made me feel as if the critique I was voicing was hostile, emotional, irrelevant and outdated. At the same time, the response made me fiercely curious about the *things not said*. What I read as a closed and cool tone in the e-mail, reinstated the hope that my project could contribute with something closer, warmer and more open.

I have tried to keep this aim alive during this PhD project in the shape of an *attitude* when meeting and talking to children and adults. For instance, rather than performing the role of a ´researcher expert´ during discussions and presentations, I have tried to open up conversations with those listening, and allowed myself to not have the answers and to ask questions. This has been a balancing act, as I also have allowed myself to be open about my own perceptions and meanings, and to draw on a broad range of evidence when discussing the topic. Being open and facilitating trust has been important to me, and it has reminded me that those who suffer the most as a result of adults' inability to cooperate, are the children. However, I have not always been successful at creating trust and cooperation, so I have also learnt something about how difficult this is.

In order to inform my own reflections and to stimulate reflection in the practice field, I have actively offered to present my research to the communities I have engaged with. I have accepted almost all invitations to present or teach, and towards the end of the project I arranged an open and free seminar at the House of Literature in Bergen. I have presented for The Grieg Academy Music Therapy Research Centre, the Research Unit for General Practice in Bergen, and the Regional Centre for Child and Youth Mental Health and Child Welfare. I have presented at two different Child and

Adolescent Psychiatry Units, at several Educational and Psychological Counselling Services, at a National Psychology Conference, at an International Music Therapy Conference, for other PhD candidates enrolled in the Grieg Academy Research School, and for teachers and health care workers enrolled in a continued education program.

During my presentations I have stated that I want to learn about the perspectives of those who are attending the meeting, and that I believe that they have both the power and responsibility to discover and facilitate change in children's everyday life. They are the system, so to speak. A general impression after doing this is that people working in the practice field long to share their perspectives, but that they are used to attending seminars or meetings where they listen to the experts presenting. Another impression is that some find it shocking to think about ADHD and restlessness in the context of violence against children, and several experienced practitioners/researchers have told me that they are quite sure that they have overlooked instances of child abuse.

The cooperative inquiry group

During the cooperative inquiry I collaborated closely with a music therapist. She was a practitioner, and contributed with important practical experience. In addition, she made for an important partner in terms of reflecting on the relationship between research and practice. During our initial discussions, we discussed how the work of music therapists employed by the educational or health systems are framed by a diagnostic approach. We also talked about how this affects the music therapist's understanding and practical approach. We decided to co-facilitate the cooperative inquiry group as we respectively had relevant experience from research and practice.

The division of labour would also enable one of us to focus on structure and participation in the group, while the other could focus on content and stimulating discussions. I kept a research diary where I noted how the dynamics in the cooperative inquiry group unfolded, and wrote summaries of discussions I had with my co-facilitator and the kindergarten staff between meetings. My co-facilitator and I

also had regular meetings where we discussed how we best could facilitate the process in the group. My main supervisor also participated in some of these meetings. I write about the cooperative inquiry meetings in the paper 2. To give a short context for these descriptions, I will now outline some issues I discussed with my co-facilitator after the first and before the last meeting.

After the first meeting we were very pleased with how the meeting had gone. The music therapist felt she had been surprisingly honest, and had been able to also discuss challenges related to her position. We were glad that we initially had been clear about the fact that all the participants came from different context and had different perspectives, and that these should be tolerated. I talked about the art of balancing my own position in the group; I felt I was taken very seriously and given a lot of space because I was doing a PhD, but I wanted all the members to participate and be recognised. We felt that the participants were engaged, but we were a bit surprised that their main interest was to learn more about ADHD. We had intended the discussion to be a bit more general and broader about children's restlessness. We were happy that the meeting ended with one of the fathers suggesting that we focus on our own contributions to restlessness.

Before the last meeting, we were a bit frustrated. Several of the participants that had not been involved in the community music therapy were interested in knowing more about how the children had experienced being a part of this. And whether the project had created any changes in their everyday interaction in kindergarten. However, as the community music therapy project had been quite intense and challenging, several members felt the need to discuss the problems related to the community music therapy project. We discussed how the community music therapy project had been positive for the children and that this 'made it worth it'. There were some differences in how those directly involved in the community music therapy project understood the restlessness and outcomes during the course of the project. Some saw few differences in the group before and after, others pointed out several positive developments that had taken place. These differences in perspectives strained the

group dynamics somewhat, but also stimulated our shared reflection and reminded me of the importance of exploring and recognising different perspectives.

The community music therapy project

During the community music therapy project, I collaborated with two music therapist employed by two different Educational and Psychological Counselling Services in the city in which the study was carried out. I presented my PhD project to the staff and the leader at one of these services, and asked them if they could help me find a suitable kindergarten for the project. The presentation ended up in a discussion of restlessness and systemic approaches, and the leader informed us that they were interested in increasing their focus on systems work, prevention and project-based approaches. The leader of the Educational and Psychological Counselling Service put us in contact with three kindergarten leaders that were interested in participating. In the end, the music therapists and I chose to focus on one kindergarten. This enabled us to engage in a deep and focused exploration of one specific context. A comparative approach involving three kindergartens would have been too resource demanding and would have generated too much data for the scope of this study.

The music therapists and I chose a kindergarten with an experienced group of teachers, who were known for their ability to carry out projects. This kindergarten also struggled with restlessness. The leader and staff of the kindergarten were involved in the planning and execution of the project. The open, unplanned and dynamic approach that is central to an action research approach, proved to be one of the most challenging aspects of our cooperation. In retrospect I think that I explained this at the best of my abilities, but that I could have prepared the kindergarten leader and staff better with regards to how such a process can *feel* and how things often get worse before they get better.

An important aspect of this process was how the children engaged in the community music therapy project. Two students on practicum placement were responsible for planning and facilitating the music therapy sessions. The majority of the children participated in a conventional and joyful manner during the music therapy sessions,

some were shyer than others. A few children participated in a way that challenged the students' structure because it followed a different pace, was loud or interrupted the focus of the group. The staff initially communicated that they wanted me to observe their practice and contribute with research-based knowledge. The idea was that my input could inform and facilitate a reduction in restlessness.

As the community music therapy project unfolded, this expectation seemed to create a standard in relation to which we (the students, the music therapists and I) felt that we were under-performing. Rather than reducing restlessness, we encouraged the children's initiatives and exploration, and sometimes struggled with setting boundaries. We had no prior experience of collaborating on such a project, and it was challenging to simultaneously establish a well-functioning collaboration amongst ourselves, with the staff and with the children. The staff interpreted the children's restlessness during the initial weeks of the community music therapy project as the children's way of communicating uncertainty and insecurity in the absence of conventional structure. The staff explained to us that the children were restless because they did not know what they were supposed to do; what *we* wanted them to do.

As the staff rightly pointed out, the children did not even know that there would be a performance at the end of the four weeks. The naked truth was that there would be a performance *if* we were able to create one together with the children. During meetings and conversations with the staff, it became clear that they did not feel fully included in the project. Understandably, they also felt partly invaded by our presence. The staff were also concerned about one or two of the more vulnerable and extrovertly restless boys, as they felt the lack of external structure destabilized their inner worlds and counteracted the progress they had built through creating structures over the last year. These two boys became a focus in the case study presented in the paper 2.

During the community music therapy project, I interviewed the participants to gather data, but also to facilitate my own reflections, the reflection of the staff members and

leader, and to include the reflections of the children that participated in the project. The interviewing both relieved tensions, created insight and helped us discover and integrate different perspectives. The staff and leader of the kindergarten, the music therapists, the students and I collaborated to better understand the children's comments, body language, drawings and games. Towards the end of the community music therapy project the staff and leader told us that ´it had all been worth it´, despite the strenuous process of putting an improvisation based performance together on such a short notice. Both the leader, the staff, the music therapists, the students and I were proud of what we had been able to put together over such a short and intense four-week period. We also bonded over our shared pride in the children, their performances and dedication. We were all moved by the way in which they had seized this project as an opportunity to participate, collaborate, and to explore their own resources and abilities.

Reflections after community music therapy and cooperative inquiry

The community music therapy project had ended with Easter vacation, and the final meeting in the cooperative inquiry group was held after the summer break. After these two projects were over, I met with the leader of the kindergarten and the two educational leaders who had participated in both the community music therapy project and the cooperative inquiry group. The community music therapy project had been more demanding than we all had expected. We talked about our experiences and intentions, and reflected on the preliminary findings from the study.

We discussed whether the community music therapy project had *created* restlessness for the children and for the staff, and whether it had turned the restlessness into something productive. We agreed that it had been positive for the children in general, and very good for some of them, but that it also had created more restlessness for some of the boys during the initial phases of the project. The music therapy project had also been more resource demanding than the staff had expected. Together we tried to understand how a project like this could be improved. We discussed how a clearer division of roles and increased mutual recognition could have improved the cooperation between the permanent staff and those visiting.

We also talked about the dynamics that stemmed from the fact that we (the students, the music therapists and I) had entered the kindergarten with a lot of resources aimed at facilitating the children's creative vitality. The staff were, especially in the beginning, left with the responsibility to set boundaries. We played with the idea that this division of responsibility could be a seen as a parallel to the traditional roles of *mother* and *father*. In this case we were the 'fathers' who came home to play, and the permanent staff were the 'mothers' who had the main responsibility for everyday chores and running a well-functioning home. We further elaborated on the relation between these stereotypical roles and findings about gender-related perspectives in research on ADHD. The process of having your child diagnosed is largely regarded as 'the mother's project'. Mothers tend to be more positive in relation to diagnosis and medication. Fathers tend to be more sceptical towards diagnosis and medication, but are often less involved in the everyday responsibility than the mothers (Olsvold, 2012; Ilina Singh, 2003).

From this we went on to discuss resources and coverage. The kindergarten staff were three adults on twenty children, and we were seven adults on thirteen children. We talked about how the strain on the staff would had been lessened if the students and music therapists were to be alone with the children in one of the rooms. This could have forced the students to take more responsibility and would have given them a more realistic experience of restlessness in kindergarten. However, this could have 'insulated' the process, which could have kept us from learning about the connections and transactions between the community music therapy context and the everyday context of the kindergarten. As a researcher, I wanted to come as close as possible to everyday life in kindergarten in order to increase the ecological validity of the findings.

In my research diary where I wrote about this final meeting with the leader and staff, I reflected on why the music therapists, the students and I said 'the staff know the children best' when it came to structuring and disciplining the children. It seemed that we 'knew them best' in relation to playful exploration. In this diary I also noted that maybe the students and music therapists were hesitant about enforcing boundaries as

they did not know the structures in this kindergarten. As the project progressed, the students took more responsibility in regard to setting boundaries, but this was perhaps also due to the increasingly safe relations they had with the children.

Towards the end of this meeting with the staff and the leader, I gave some practical examples and observations in which musical interaction had affected the children in a positive way. I told them about one of the girls who had protested and gone outside the circle during one of the music therapy sessions. As I started stroking her back, her foot started bouncing up and down in synchronicity with the music, despite the fact that her arms were crossed and her gaze was sternly fixed on the floor. I interpreted this as my support helped her use the music as a way into the group again. On hearing this, one of the educational leaders lent forward, smiled and said loudly ”Yes! This is what we live to hear! It’s this…!” I offered to talk to the whole staff about similar experiences from the community music therapy project, so we could discuss some practical implications of a musical approach to restlessness in the group.

We also discussed how Norwegian kindergarten staff have been under pressure from two fronts over the last years. On the one hand, many kindergartens are given less and less resources to deal with the ‘behaviour children’. These are children without a diagnosis that are experienced by the kindergarten staff as challenging. On the other hand, kindergartens have been given an increased amount of tasks, for instance mapping every child’s language development, and preparing lunch for the children every day. We talked about how the community music therapy project had made the staff less coordinated during the project, by relocating staff members and taking up their time. The leader of the kindergarten described how a well-organized daily structure was important for maintaining and improving the quality of the kindergarten through allowing them time off to participate in for instance continued education.

5.3 Methods for collecting and analysing data

I have now outlined some relationships between action and reflection in this PhD project. I will go on to present the concrete methodological tools I have used for data collection and analysis.

The two main methods I have used are cooperative inquiry and case study. Cooperative inquiry enabled me to focus on the collaborative and interdisciplinary process of constructing ecologically valid understandings about children's restlessness. This approach also allowed me to stimulate reflections about ADHD and restlessness in practice, which is the overarching aim of this thesis. I chose a case study approach for the community music therapy project, because it enabled me to study restlessness as a phenomenon unfolding in a certain context. This approach also enabled me to study and combine different kinds of data. I will now describe how the data was collected and analysed during the cooperative inquiry and the community music therapy project.

5.3.1 Collecting and analysing data from the cooperative inquiry

The overall structure of this PhD thesis can be understood as belonging to an action research tradition (see 5.2). In this section I describe one specific action research approach: cooperative inquiry (Heron & Reason, 2001). I will now describe four overlapping and interrelated phases in the cooperative inquiry process as described by Heron and Reason.

Four phases of cooperative inquiry

The cooperative inquiry process described in this thesis consisted of four phases. In phase one, the participants came together as a group of researchers to explore the area of human activity I have chosen to call *children's restlessness*. We used the first meeting to agree on the focus of our inquiry, and it turned out that the group was interested in exploring restlessness with a focus on ADHD and on the contributions of adults and structures in the surrounding systems.

In phase 2, we took on the role of co-subjects. This meant noticing and sharing our own experiences and actions between meetings. Some participants shared experiences of being restless in a meeting, others shared conversations they had with children in kindergarten, at home or in a clinical setting, others shared colleagues' reactions to their participation in the cooperative inquiry group and the topic of children's restlessness.

In phase 3, which started during the second meeting and lasted until the end of the cooperative inquiry, we deepened our engagement with the topic and let our experiences and deepened understandings guide the process. The participants shared their reflections about how it seemed difficult to initiate new practices. Rather than emphasising action and practice change, the group agreed to focus on developing our understandings and sharing these with our respective colleagues. However, several of the participants tested out their deepened understandings in an active way, for instance by challenging colleague's understandings in meetings at work, by looking through archives to explore the relationship between child abuse, restlessness and receiving an ADHD diagnosis, or by slightly changing routines for referrals by challenging narrow understandings and facilitating a more collaborative approach in their clinical work.

In phase 4, the participants shared their practical and experiential data and reconsidered the idea of children's restlessness. In many ways this phase was represented in meetings two, three and four. The four meetings in the cooperative inquiry group were spread over the course of several months. As a group, we wanted to have time between each meeting to engage in exploration and practice, and in light of this reconsider our understandings of the concept *children's restlessness*. The fourth and last meeting was used as a space for sharing experiences from the community music therapy project. By the request of the other participants, we shared a video recording of the music therapy performance and discussed children's restlessness in relation to this. The music therapy performance was held in Easter, while the last meeting in the cooperative inquiry group was held after the summer holidays.

Collecting and transcribing the data

During the cooperative inquiry group, data were primarily collected as audio recordings. The audio recordings were later transcribed and the transcriptions were anonymised. The first meeting resulted in a transcription of around 15600 words, the second meeting in 21500 words, the third meeting in 22000 words and the fourth meeting in 30300 words. The total amount of transcribed material amounted to nearly 90000 words. In addition to this, both my co-facilitator and I took notes during these meetings. These were used to stimulate reflections and contextualise the transcribed material.

Thematic analysis and member check procedures

The transcribed material from the cooperative inquiry group was analysed using thematic analysis as described by Braun & Clarke (2012). We described the thematic analysis as a stage-wise process emphasising reflexivity as described by Binder, Holgersen & Moltu (2012). As member checking is central to an action research approach, I invited the participants to get involved in the analytical process. First, I had conversations with the participants I was most closely involved with, namely the kindergarten staff and the music therapists. These five participants were both involved in the cooperative inquiry group and the community music therapy project. Between meetings I also sent out an email to all the participants in the cooperative inquiry group in which I summarised the meetings and asked them to contact me if they had any questions or thoughts about the meetings. I seldom had any responses to these emails, but they served to remind the participants that their opinions and perspectives mattered to me and that I could be contacted.

I used thematic analysis as a concrete tool for analysing the data, and after a preliminary analysis of the transcribed material, I sent a summary of the analysis to the participants via e-mail. In this email I also invited the participants to an analysis meeting in which we could discussed the preliminary results. Three of the members from the cooperative inquiry group took part in this meeting, and one responded to the results on e-mail. The kindergarten staff let me know that they trusted my analysis and that they simply could not prioritise further involvement in the project. The steps

of the thematic analysis of the data material from the cooperative inquiry group are described in paper 2.

5.3.2 Collecting and analysing data from the community music therapy project

Instrumental case study

A case study is the study of both the common and the particular, but the end result often presents something unique. This uniqueness pertains to the nature of the case, its historical background, the physical setting, other contexts relevant to the case, other cases through which the case is recognised and those informants through whom the case can be known. Uniqueness, particularity and diversity are not necessarily appreciated, and the case study format has at times been little valued in for instance therapeutic practice (Stake, 1994). A case study approach is suitable when the main research questions are how or why, one has little or no control over behavioural events and when the focus of the study is a contemporary phenomenon (Yin, 2014). Some researchers claim that the case study should "tell its own story", but Stake (1994) claims that the researcher ultimately decides what is the story of a case. On the continuum from *telling lots* to *telling nothing*, it is the single-case researcher who has to choose within the frame of different premises set by the surrounding ecological systems.

The main research question for this sub-study (paper 3) was: *How can children's restlessness be understood from a community music therapy perspective stressing children's participation in context?* I had little "control over behavioural events" (Yin, 2014, page 12), but my role as participant observer meant that I to some degree also manipulated the behaviours of the other participants, and that my understandings were affected by these interactions. I chose to do an instrumental case study as this facilitates insight to an issue or refinement of theory by examining a particular case (Stake, 1994). The aim of this case study was to gain insight about the processes in which children's restlessness appear and how adults describe these processes. As Stake (1994) describes (page 239):

> *With broader purview than that of crafters of experiments and testers of hypotheses, qualitative case researchers orient to complexities connecting ordinary practice in natural habitats to the abstractions and concerns of diverse academic disciplines. This broader purview is applied to the single case. Generalisation and proof (…) are not without risk.*

After a long process of going back and forth between the different kinds of data and different children within these data, I chose to focus on a group of boys, and Paul in particular. I chose to use observations made by the music therapy students and myself that were written down in our research diaries. This selection of data and persons allowed me to learn more about these children's restlessness within the frame of music therapy. It also allowed me to reflect on the observations made by the two music therapy students who had worked closely with the boys, and my own observations. I am a researcher and a psychologist, while the students were practicing within the field of music therapy. Including notes from all three research diaries would enable me to triangulate the results. Also, it allowed me to bridge understandings from psychology and music therapy, and from research and practice.

Collecting data as observations, video recordings, interviews and drawings

During the community music therapy project, data were collected by using several methods over the four weeks of the music therapy project, and in several follow up meetings with the staff and children. I participated in the music therapy sessions as participant observer, and kept a research diary where I noted observations of the children and my own reflections about the children, the context, the other adults in the project and the development of the project. In this diary I also noted my own emotional reactions and reflections about theoretical concepts and practice. The music therapy students kept similar research diaries. I also interviewed the children and the staff about the process and their experiences during the music therapy project. Unlike the discussions in the cooperative inquiry group, these interviews were not recorded and transcribed.

Retrospectively, it would have been interesting to record and analyse these interviews in a similar way to the discussions in the cooperative inquiry group. However, at the

time I only made short notes during these interviews, and based my final transcriptions of the interviews on a combination of these and my own memory of the situation immediately after the interview. The transcriptions of the children's interviews were kept together with drawings they made during these interviews. I used the interviews and drawings to deepen my own understandings of the process, and as a basis for discussions with the other adult participants in the community music therapy project.

The interviews with the children and the drawings they made were important in stimulating a child perspective during my discussions with the other adult participants and as I analysed the data. I also used video recording to document the performance. I filmed the performance with one camera from the perspective of the audience. During the first performance, the camera was placed on a tripod in the middle of the first row. I took a more participatory role during this first performance, but placed myself at the edge of the semi-circle almost in the audience. During the second performance, I held the camera and moved about in the audience to create a more dynamic recording.

Analysing the data

The material that I had collected during the community music therapy project consisted of many different kinds of data; research diaries, interviews and video recordings. I chose to focus on the process of creating a music therapy performance and how we understood the children's participation and experiences within this process. I therefore chose to focus on the research diaries kept by the two music therapy students and myself. I used the video recordings of the performances and the interviews with the staff and children to contextualise my analysis.

I wanted to relate my case study to other case studies of children's restlessness in music therapy. As most of these case studies were descriptions of music therapy with one boy or a group of boys, I chose to focus on the boys that were experienced by the pedagogical leaders and by us as the most restless. Within this group of boys, I chose to focus on one boy who was described by the adults as having problems with sitting

still and concentrating on one task at a time. In this thesis I argue that adult understandings are important, and that they cannot be completely separated from the observed phenomenon. To enable a reflexive and contextualised interpretation of adult observations of Paul and his friends during the community music therapy, I chose a sociocultural approach to analysis inspired by Grbich (2013).

Grbich's (2013) approach to doing a sociocultural analysis, entails 1) identifying the boundaries of the narrative, 2) exploring the content and context of the story, 3) comparing different stories if possible, 4) linking these stories to relevant structures and cultures, and 5) interpreting these stories with an awareness to own positions and reactions (page 222). I will now give a short description of how I related to this analytic framework:

1) The story presented in paper 3 is limited by the start-up of the community music therapy practice, but extends beyond this as we also include observations made some time after the performance. I gathered all the descriptions of Paul and his friends from the research diaries of the two music therapy students and myself. These descriptions were organised chronologically and in relation to narrator: the female music therapy student, the male music therapy student, or myself.

2) The focus of this analysis was the behaviours and experiences communicated by Paul and his friends. However, I also chose to focus on our own sense-making of these behaviours and communicated experiences, in the context of an unfolding process in which we were invested as co-creators and observing participants. By using subjective descriptions told by a certain person during a certain phase of the project, I was able to outline how descriptions of the children changed with the observing adult and over the course of the project.

I was able to reflect on our observations and descriptions as a reflection of several interrelated processes: our own participation, the participation of Paul and his friends, and the development of a performance that increasingly involved the children and their interests. I was also able to reflect on the ripple effects of the community music therapy project by including conversations we had with Paul's parents and with Paul

himself after the performance. I related our case study to a wider context by presenting an overview of case stories of music therapy with restless children in the beginning of paper 3. I related our case study to the wider field of community music therapy by discussing it in light of central qualities to this approach (PREPARE).

3) As sections of the stories told in the three research diaries about Paul and his friends overlapped, I was able to compare the meaning-making of the music therapy students and myself in relation to one specific incident. This incident was a how Paul struggled to get started with his improvisation on-stage during the performance. I reflected on how we all focused on our own contribution in this moment and understood our own contribution as important in getting Paul started.

4) I linked our own descriptions to the ideals presented in PREPARE, to the other music therapy case studies described in the introduction of the paper, and to research on ADHD.

5) I interpreted our descriptions with a focus on our own positions and roles, and by using different frameworks for understanding the stories we had told about Paul and his friends. For instance, I reflected on how changes in Paul's behaviours could be understood as changes in symptoms and function (ADHD) or as change in behaviours resulting from experiences of participating and collaborating musically.

5.3.3 Methods and ecological validity

The ability to produce ecologically valid measures of children's restlessness, or more broadly; their health and well-being, is dependent on how we measure, describe and assess their behaviours and experiences. DeNora (2013) points to two central problems with standard quantitative instruments: First, they remove the process of data elicitation from everyday meanings and practices. Second, they are not neutral, but should be understood as discursive texts imbued with a politics of expertise and an image of the client. DeNora also argues that standard quantitative instruments promote an ontology of wellness/illness that downplays its emergent nature and the importance of temporality and context. She also suggests that the case study approach

is temporally sensitive, fits with an emergent ontology on wellness/illness, that it is client-centred and potentially user-led.

The methods I have used for data collection, and the involvement of the participants in the data analysis, are chosen with the aim of producing ecologically valid research. One of the critiques I voice in this thesis is that ADHD might not represent an ecologically valid description of children's restlessness. In his book *The Ecology of Human Development* (1979), Bronfenbrenner proposed that ecological systems model would provide researchers with a better theoretical and practical framework for researching children's development. He claimed that from an ecological systems perspective "much of developmental psychology, as it now exists, is *the science of the strange behaviour of children in strange situations with strange adults for the briefest possible periods of time"* (page 18-19, author's own italics).

My choice of methods for data collection and analysis have been informed by a wish to come closer to the meanings and everyday practices related to children's restlessness. I have also used methods that allowed me to describe the emergent and changing nature of children's restlessness. The apparently neural descriptions of children's behaviours presented in the ADHD diagnosis, can also be read as value laden and as over-emphasising the stable nature of children's restlessness. My choice of methods sets me apart from mainstream research on ADHD. However, the diagnostic process relies heavily on qualitative descriptions of children's behaviours made by surrounding adults. This is one of the reasons why I chose cooperative inquiry as a method that would allow collaborative reflexivity, and facilitate the construction of ecologically valid understandings of children's restlessness (paper 2).

6. Findings

I have now presented the methodological overarching approaches that have been central to this thesis, namely reflexivity and action research, and reflected on how these overarching approaches have shaped the research processes and findings presented in paper 1,2 and 3. I have also outlined some important processes related to the cooperative inquiry group and to the community music therapy project. I have described reflections made by the leader of the kindergarten, the two pedagogical leaders and myself after the cooperative inquiry group and the community music therapy project. I have also described the methods used for data collection and analysis, namely cooperative inquiry, case study, and thematic analysis. I will now present a summary of the findings from paper 1, 2, and 3.

6.1 Summary paper 1

The first paper in this thesis is called *How do we Understand Children's Restlessness? A Critique of the Biopsychosocial model and ADHD as the Dominating Perspective in Current Understanding and Treatment*. In this paper I contrast two different approaches to understanding children's restlessness. The first approach is the biopsychosocial model and the ADHD diagnosis, and the second is an ecological niche-approach based on the concept of historical ontology. I use a personal correspondence with the National Centre for ADHD, Tourette's syndrome and Narcolepsy (NK-ADHD) in order to reflect on ADHD in a Norwegian context. Based on additional information provided through this correspondence, the official stance of Norwegian clinical-political authorities can be seen as understanding children's restlessness as a problem located within the individual.

I use the ecological niche-approach to describe how ADHD is an understanding that has emerged within a particular niche. This niche is made up of several vectors, and I discuss three of these vectors. The first vector is *concept of disability*: ADHD represents a particular concept of disability, in which the problem is understood as

located within the individual child. The second vector is *cultural polarity*: According to the ADHD diagnosis and mainstream research on ADHD, restlessness can be understood as a resource and as dangerous or frightening. The third vector is *release*: The ADHD diagnosis provides an explanation which gives release from confusion, guilt and shame. I concluded that the two approaches described in the paper can be understood as belonging to different levels of analysis, and that researchers and practitioners should be aware of this and be able to reflect on strengths and limitations pertaining to these.

6.2 Summary paper 2

The second paper is called *Do we understand children's restlessness? Constructing ecologically valid understandings through reflexive cooperation*. This paper is based on the findings in the cooperative inquiry group. In the analysis my co-authors and I focus on the understandings that were presented and discussed during the group meetings. In the beginning of the paper we present ADHD as neurobiological disorder, stimulant treatment of ADHD, ADHD as the mother's project, ADHD and violence, and an ecological systems approach to children's restlessness. This broad approach supported the breadth of the findings from the cooperative inquiry group, where the participants discussed restlessness from many different perspectives that could be understood as belonging to several different ecological levels.

Our results show that on the level of the individual children's restlessness can be understood as an individual trait, as expectation to be seen and heard, and as a result of traumatization. On the level of dyad, group or family, children's restlessness can be understood as a relational phenomenon and as parent's problems. On the level of community, children's restlessness can be understood as a lack of communication, and as lack of structures or resources.

We discuss how current mainstream understandings of children's restlessness are dominated by a diagnostic perspective in the shape of ADHD, but argue whether ADHD represents a *good enough* understanding of children's restlessness. We

discussed of findings in light of the concepts *validity*, *solidarity* and *sustainability*, and claim that there is a need for integration of several perspectives in this field. Based on the literature review and our own findings, we point to the need to integrate a child perspective and a child maltreatment perspective in particular. Also, we claim that our findings show that there is a need to remind adults of their responsibilities and of the ecological complexity of children's restlessness.

6.3 Summary paper 3

The third paper is currently submitted, and is titled *The dynamics of ADHD in children – a critical standpoint*. In this paper we present a case study of restlessness as it unfolds during a community music therapy project in a kindergarten. A boy called Paul and his three friends John, George and Ryan, are the focus of the case study. Paul was chosen because he could fit the behavioural descriptions of an ADHD diagnosis, but the restlessness especially seemed to arise when the four boys got together. The story is narrated in the form of excerpts from the research diaries of the first author and two music therapy students who facilitated the community music therapy project.

The use of three research diaries allowed us to triangulate the observations. By organizing the diary excerpts according to the chronological development of the project, we were able to reflect on how the restlessness could be understood as part of a process consisting of four overlapping phases. We titled these phases *Exploring musical vitality and cooperation*, *Consolidating positions*, *Performing together* and *Discovering ripple effects*. The paper starts with a review of previous case studies of restless children in music therapy, and in the Discussion we reflect on our own case study and previous case studies in relation to the qualities central to community music therapy.

Our findings suggest that ecological and performative qualities can help us understand restlessness as a performance of relationships, and illustrate how community music therapy can offer a unique context for this. Activist, reflective and

ethics-driven qualities point to the fact that as observers, we focus on our own contributions, and often present a narrow and limited version of events in which contextual factors are overlooked. The review of previous music therapy case studies presented in this paper, reveals that restless children often have experienced neglect and abuse. We conclude that future music therapy research on children's restlessness should address contextual and systemic contributions to restlessness.

7. Discussion

I have now presented a summary of the findings from the three papers. After a short introduction, I will discuss and further reflect on these findings by returning to the three research questions presented earlier:

1. How can children's restlessness be understood as a bioecological phenomenon?
2. How can adults' understandings of children's restlessness be seen as a result of interactions between process, person, context and time?
3. How can we understand children's restlessness on the premise that children and adults are participating subjects acting on each other?

In the beginning of this comprehensive summary, I defined restlessness as *the label given to an experienced form of vitality that appears in the space between the described (the child) and the describer (the adult)*. In other words, I conceptualise restlessness as a relational phenomenon that emerges in a certain context. Descriptions of children's restlessness, also descriptions that are part of a diagnostic process, are given from an adult's perspective. The intention is to reveal something about the child. Indeed, the acting child reveals something about himself or herself through their actions. However, the *adult* is the describer and thereby also an acting subject and the narrating voice in these descriptions. This position of the adult describer is in other words not neutral. This should lead us to understand descriptions of the child as also revealing something about the adult and the adult's ecological system. For instance, if an adult describes a child as restless, this could for instance be a sign that the adult does not feel comfortable with the child's playful vitality, that the adult is tired or stressed, or that the adult has a strong theoretical focus on restlessness as symptom of disease.

In this section I will first reflect on the relationships between the papers 1, 2, and 3. Thereafter I will discuss the findings from these papers on the basis of the premise that children's restlessness is an bioecological phenomenon described by adults. I will discuss how this understanding of children's restlessness can inspire change in research on children's restlessness. I will argue that there is a need for an integration

of understandings. I will specifically suggest two "new" ecological levels that can allow for a more precise integration of biopsychosocial knowledge into an ecological systems model, which can contribute to discussions about the relational nature of for instance biological findings. Finally, I will reflect on some consequences of seeing children and adults as subjects acting on each other.

7.1 Relationships between the papers

The three papers can be understood as pertaining to three different levels, not unlike the levels of an ecological system. Starting with paper 1, I move from macro to meso to micro. In paper 1 I also reflect on how structures in the macrosystem are made visible through the emergence of the ADHD diagnosis in a Norwegian context. In paper 2 I invite adults in one local community to discuss children's restlessness across settings. In this paper I outline how ecologically valid understandings are constructed as a cooperative process at a mesolevel. In paper 3, I explore children's restlessness up close by reflecting on restlessness as a symptom, as participation and as a phase in a creative process.

7.1.1 The papers as a development over time

These three papers have been published in 2014, 2015 and paper 3 is currently submitted. The papers therefore represent a development over time (chronosystem), and reflect how my ideas and understandings have developed over the course of this PhD.

The three papers are three visible products that make up three points on a timeline. Between these very visible points, I have been immersed in a less visible, but deeply engaging reflexive process. This reflexive process could be described as an "open play of reflection across various levels of interpretation" (Alvesson & Sköldberg, 2009, page 271). The co-authors of the papers, have played an important role in this process. Their input has stimulated me to sharpen my explorative focus. They have contributed not only to the three texts, but also by sharing their reactions to the

findings, by encouraging me to read specific literature, by limiting the scope of the papers, and by encouraging me to see beyond my own work.

In the three papers I have reflected on children's restlessness as object of knowledge constituted by compatible and not so compatible forms of knowledge. I have also reflected on how children's restlessness can be seen as a complex and co-constituted phenomenon that exists across and within different ecological contexts and on different system levels. I have reflected on children's restlessness as a product of my own and others' subjective construction, but also as a phenomenon rooted in deep underlying patterns that go beyond social constructions. I have also reflected on how children's restlessness, and ADHD in particular, can be seen as a social construction that has served, and is still serving, a certain purpose over time and on all levels of the ecological system.

Distance and closeness

In the beginning of this thesis, I illustrate how I have moved between perspectives and positions. Each position and perspective seems to afford something different. A meta-perspective, most clearly presented in paper 1, has allowed me a certain distance to children's restlessness as lived phenomenon by allowing me to reflect on theoretical aspects of children's restlessness. Engaging with different adults on a mesolevel, was in many ways the most challenging part of the reflexive process for me, as I had to straddle very different perspectives and contain conflicting emotions related to our discussions. At this mesolevel, engaging with theories, literature and research allowed me a sense of space in relation to emotions and practice that can feel very intense and dense. Similarly, engaging with the people in the practice context, my co-facilitator in particular, allowed me to challenge and reorient my own theoretical understandings by giving access to emotional and personal experiences.

Paper 3 includes descriptions of my own direct engagement with children's restlessness. Although paper 1 and 2 were written from a position of being engaged, paper 3 most directly engaged me as a researcher and participant. During the community music therapy project, I really enjoyed working together with the children

and the adults in the kindergarten and local community. I would describe the experience as very motivating, humbling, demanding, revealing and levelling.

Motivating in the sense that I got to engage directly with other developing and curious human beings, not only texts about development. Humbling and demanding in the sense that I got to experience first-hand how much work and effort it takes to create something and really collaborate. Revealing in the sense that I experienced how understandings emerging within a certain context is of a different nature than overarching theoretical perspectives, but also in the sense that we revealed ourselves; who we were. We did this by initiating actions, and by completing actions initiated by others. In this sense the community music therapy project was what Hanna Arendt calls *a space of appearance* (1998). We appeared in this shared musical space, we watched each other appear, and we watched others watching us appear.

Ecological levels and underlying mechanisms

Across the three papers I have tried to contextualise understandings by placing them on different levels in the ecological systems model. I have reflected on macro-level issues like philosophy of science and historical time in paper 1, the importance of culture in paper 3. In the beginning of this PhD project I had not yet read about critical realism, and I tried to avoid the problem of generalizing qualitative research by asking questions that addressed general issues addressed in qualitative and quantitative research. For instance, in the beginning of paper 1 I ask: "What is a 'normal' child? Who has the right to decide what is normal? Why? What are the consequences of our adult expert conceptualisations of normality for the child?".

According to critical realism research findings can be generalized to the extent that they reveal real mechanisms that produce events and surface phenomena (Alvesson & Sköldberg, 2009; Danermark et al., 2002). These can be for instance biological mechanisms, like dopamine levels or genes, or social mechanisms, like the effect ADHD has on adult understandings in the face of children's restless behaviours. Although I have not called it a discussion about mechanisms, the cooperative group

discussions described in paper 2 revolve around different mechanisms that can be understood as producing children's restlessness.

The centrality of the observer and descriptions of children as narratives presented through the voice of an adult, is further discussed in paper 3. From the meta-perspective, overview and distance of paper 1, through person-to person discussions with a focus on both children's behaviours and adult's actions in paper 2, to a close encounter with children's restlessness and vitality in paper 3, these papers have increasingly challenged my ability to engage, reflect and distance myself. By moving towards the innermost system of the ecological systems model, the microsystem, I have increasingly been able to personally experience, discover and discuss possible mechanism. This process has both demanded and enabled me to develop a more personal and independent voice as a researcher. Getting involved in practice after first having written from a meta-perspective, has allowed me to contribute with perhaps surprising reflections in the practice context. For instance, it has allowed me to bring up political processes regarding diagnostic manuals, the prevalence of violence in Norway, or epigenetic findings. Simultaneously, getting involved in practice has informed my theoretical reflections and shaped my research. For instance, I have learnt about political processes that shape the daily activities in kindergartens, the importance of architecture, and the importance of seeing things that are *not there;* be it musical instruments, a sense of belonging, or to the five minutes it takes to console a crying child.

7.2 Children's restlessness as bioecological phenomenon

I will now return to the main research question: *How can children's restlessness be understood as a bioecological phenomenon?* In order to discuss this, I will reflect on the possibilities of integrating mainstream research on ADHD based on a biopsychosocial model with an ecological systems model.

7.2.1 Reflecting on *bio-, psycho-, and social* as system levels

The central premise of the ecological systems model, hereunder children's development as a bioecological process, is that changes occur as a function of interactions between the individual and the surrounding ecological systems. Children's development is in other words a relational process across many levels that happens over time, which is reflected in the alternative title of the ecological systems model: the *Process-Person- Context-Time Model* (Lerner, 2005).

The developmental process is in other words dynamic and constituted from events occurring on many different levels over time. Bronfenbrenner described the individual as the *centre of gravity* in the ecological system. This fits with Engel's (1977) descriptions of the biological, psychological and social aspects of the patient's health as central to the biopsychosocial model. However, Engel also proposes that it is the physician who must make decisions on behalf of the patient. In this sense, the ecological systems model more readily opens up for the participation of the individual than the biopsychosocial model does in its original form.

In paper 1, I argue that different understandings can be seen as belonging to different levels. Where a micro level can facilitate closeness and personal experience, a macro level can facilitate overview and distance. In this comprehensive summary, I discuss my own struggles with defining children's restlessness as a theoretical concept. The closer I came to *the restlessness*, the more difficult it became to conceptualise it.

I will try to illustrate this with a short story about arriving Bergen by aeroplane: It is a clear day and good flying conditions, and you have a good view of the city from above. You see the fish market, you see how the buildings are distributed and how the surrounding mountain landscape shapes the city. Then you exit the plane, jump on a bus to the city centre. You have the bird's eye view in the back of your head, but as you get off the bus, you are suddenly confused. Where am I? How far is it to the fish market? What is this strange language they speak? The place seems unrecognisable in all its noisy mess, as you think back on the quiet and neatly organised city that you observed from your aeroplane window.

Which perspective is ‘real’? Which is useful? How can the two positions, being in a plane or standing on the street, provide us with useful knowledge? Current mainstream understandings largely build on ‘birds view’ perspectives of children’s restlessness. Understandings that emphasise ecology and participation can act to balance this tendency and bring closeness, complexity and sustainability to current mainstream understandings.

Suggesting two “new” ecological system levels: endo and nano

According to Engel (1977), the biomedical model leaves no room for social, psychological or behavioural dimensions. The biopsychosocial model is therefore a better fit with the ecological systems model. However, the innermost level of the ecological systems model is the microsystem. The *social* in biopsychosocial is well integrated in the ecological systems model, as the microlevel refers to social interactions between the child and other persons in the immediate environment. The meso-, exo- and macro-levels further describe the wider social circumstances in which the child develops. Based on the literature presented under *Theoretical framework*, I suggest that the centrality of the *biopsychosocial* person in the ecological systems model could inspire two additional levels: an *endosystem* for describing the psychological aspects of a child’s development and a *nanosystem* for describing biological aspects of a child’s development.

In relation to children’s restlessness, relevant processes at the endosystem could be thoughts, feelings, understandings and intentions that at a microlevel could be observed as musical expressions, bodily movement or verbal language. Bronfenbrenner himself pointed to the fact that development should be studied not as general processes, for instance cognition and emotional regulation, but in relation to *content*, for instance what the child is curious about, desiring or fearing (Bronfenbrenner, 1979). An example of research that could be described as pertaining to the endosystem, which also includes a focus on the content of children’s development, is research on children’s own perspectives and child perspectives as described by Sommer, Samuelsson and Hundeide (2010).

Adding these two system levels could enable a more precise integration of biopsychosocial evidence, and would also challenge researchers presenting biopsychosocial findings to reflect on the relational nature of their findings. This would open up a new field of relationally oriented biopsychosocial research. For instance, evidence of neurological (dys)function could be contextualised by including information about the participants' surrounding ecological systems, including the chronos system.

A precision of levels by adding endo- and nano-levels, could also inspire a reinterpretation of mainstream findings by pointing to the importance of exploring *relationships between* levels. It could also facilitate the integration of seemingly unrelated fields like child development and architecture (paper 2). Adding two more levels to the ecological systems model could also support the development of ethical guidelines for research with an emphasis on children's ecology. This could for instance highlight the relevance of checking whether restless children included in a neurological study have been subjected to traumatic experiences. It could also remind researchers and therapists about the political aspects of children's health and well-being.

The development of new technologies and instruments has allowed researchers to study biological processes in a more advanced manner than before. Children that fit an ADHD diagnosis often differ in their patterns of neuronal activity in relation to 'normal' children, and these processes are related to both endogenous and exogenous factors (Vaidya & Stollstorff, 2008). Epigenetic research provide insight to the interaction between genes and environment. In relation to ADHD, findings from epigenetic research indicate that children differ in their susceptibility to environmental factors *for better and for worse*. This goes against the previous idea of children being either resilient or vulnerable to environmental adversity (Belsky et al., 2009). These findings point to the importance of the *relation* between the level that I here call the *nanosystem* and other levels in the child's ecological system.

7.3 Children's restlessness as forms of vitality, action and development

I have now reflected on whether adding two additional levels to the ecological systems model could inspire a more precise integration of biopsychosocial research into the ecological systems model. I have also argued that such an integration might act to challenge the stable and objective nature of biopsychosocial findings. I will now return to the second research question of this thesis: *How can adult's understandings of children's restlessness be seen as the result of interactions between process, person, context and time?* In order to answer this question, I will draw on Stern's concept of *forms of vitality*, and Arendt's concept of *action* and *space of appearance*.

7.3.1 Action, vitality forms and development in the space of appearance

According to Stern (2010) forms of vitality are constituted from five naturally occurring dynamic events; movement, time, space and intention/directionality. What is the difference between *forms of vitality* as Stern describes it and *action* as Hannah Arendt describes it? I am not qualified to do a thorough analysis of similarities and differences, but as I see it, forms of vitality and action can be understood as two closely related phenomena.

Stern talks about *action* as a modality, and *vitality form* as a quality that can stay the same across modalities. One example is how Stern describes and discusses an episode of affect attunement: a mother and her ten-month-old daughter communicate a shared experience through sound and action, respectively. The daughter "opens" and "closes" her face by raising her eyebrows and opening her mouth while simultaneously raising her arms and letting them fall. The mother responds with a "yeeAAAaahh" that "falls" in pitch as the daughter lets her arms fall. Stern argues that affect attunement is based on matching and sharing dynamic vitality forms across modalities; in this example action and sound (Stern, 2010, page 41).

In the example from Stern, the mother's role is that of attuning to the baby's vitality forms and responding to these as a way of sharing experiences. This dynamic is in the example above initiated by the mother, but can also be initiated by the baby, with exchanges going back and forth in mutual attunement.

Arendt (1998) does not give a close and detailed description of attunement and mutual exchanges of experience. Her reflections on action are of a political and philosophical nature (page 198-99):

> *"Wherever you go, there will be a* polis"*: these famous words became not merely the watchword of Greek colonisation, they express the conviction that action and speech create a space between the participants, which can find its proper location almost any time and anywhere. It is the space of appearance in the widest sense of the word, namely, the space where I appear to others as they appear to me, where men exist not merely like other living or inanimate things but make their appearance explicitly.*

Without going too far into the political thinking of Hannah Arendt, it is possible to use her description of action as a frame for discussing the central role of action and speech in human exchange. Arendt argues that action and speech *creates a space between* the participants. Stern would possibly argue that the space is there, but it becomes alive through the matching and sharing of vitality forms. In this thesis I write about children's restlessness. I have not gone further in my definition than claiming that restlessness is a relational phenomenon. Both Stern's concept of vitality forms and Arendt's action concept fits well with how I understand restlessness. However, as I have mentioned, restlessness is more problem-focused than the words *vitality form* and *action*.

Reflecting on restlessness and space of appearance in my own findings

So how to understand children's restlessness in relation to vitality form and action? According to a bioecological theory of children's development (Bronfenbrenner, 1979, 2005) children's development happen in processes of progressively more complex reciprocal interactions. These interactions involve the child as active, evolving biopsychosocial human organism, and it involves the persons, objects and symbols in the child's immediate context. Bronfenbrenner also stresses that in order

for these interactions to have an effect on the child, they must occur on a fairly regular basis over longer periods of time. Interestingly, this resonnates with findings from music therapy research: the effects of music therapy increases as the number of music therapy sessions increase (Gold et al., 2004).

In paper 3 I describe how the community music therapy project created a different space for interacting with the children, and for the children to interact with each other. The restlessness described in paper 3 also changed as the interactions changed. Restlessness in the shape of movement, time, space and intention/directionality characterised the interactions that took place in this space of appearance to a greater or lesser extent. The descriptions presented in paper 3 were constituted from three adult voices, and we would have a different story if these descriptions were constituted from the children's voices. I wonder whether facilitating the children's creative suggestions for change in relation to timing, shape and direction, contributed with motivation by *increasing the complexity* of what was happening.

For instance, during the song *The sea is so calm*, Paul improvised by playing with the lyrics (paper 3). His improvisations added complexity: "the sea is so calm, in the night, the sea is so calm all night long" in place of the original lyrics "the sea is so calm, so calm, so calm, the sea is so calm".

Not only did Paul make the lyrics more interesting for himself, thereby increasing his own motivation during a song that quite easily could be experienced as rather boring. He also revealed something about himself and about his development: he was a creative and musical boy capable of spontaneous improvisation. Both the educational leaders and Paul's parents commented on his advanced level of maturity after they watched him improvise onstage during the performance.

Paul's improvisations during the song *The sea is so calm*, potentially revealed another side of him: a sense of group belonging and an interest to stay with the group and with the song. Paul could easily have motivated himself by breaking away and doing something else. He was described as often changing between activities, and as not focusing for longer periods of time despite the teacher's encouragement or

instructions. Breaking away from the song would mean leaving the shared space of appearance that arose from the shared activity of singing together. This space of appearance was during the song characterised by a widespread matching of vitality forms in the shape of synchronised performances of melody, tempo and direction. Paul's sustained and seemingly inspired participation in this space, could be taken as a sign that he found pleasure in sharing such an experience with the other children and with the adults.

Reflecting on spaces of appearance in the results from the literature review

In the reviewed literature from music therapy research, Herman's (1991) descriptions of Robbie's restlessness is closely related to his struggle with self-identity ("Who am I?") and his ability to be himself with others. Aigen's (1991) descriptions of Will's restlessness and fighting is partly related to his social identity as scapegoat and his personal identity as a bad boy. In relation to Arendt's concept of *space of appearance*, it is moving to read about the joint musical improvisation that is Will's reward for attending a meeting with his mother and her therapist. The joint musical improvisation becomes a rare opportunity for Will to just play with his mother and be a child.

Rickson (2003) describes how John is referred to music therapy because his teacher thinks he has artistic talent, but that John's strong rejection ultimately leads Rickson to reorient her therapeutic approach and focus on defence mechanisms. A verbal relationship with John (he tells her stories about a glass flute and three Pitbull dogs), becomes the start of a process in which Rickson is able to co-create a space for John in which he can appear as a sensitive musician. This also facilitates John's later participation in the school operetta and an opportunity to receive applause.

McFerran (2009) discusses the relationship between Ben's assessment of his own musical skills, his motivation for participating in music therapy, how ADHD medication affects his self-assessment and participation, and the tension that arises from the transition between two ecological context: the music therapy and the classroom. The start-up of medication seems to orient Ben towards a realistic

perception of his own musical skills, which in turn keeps him from participating. McFerran also discusses how the music therapy and the classroom setting gives Ben different opportunities for participation. In relation to *space of appearance*, being medicated changes Ben's appearance in the shared musical space. Also, the music therapy and the classroom offer Ben different spaces for appearance, and for him the space that arises in music therapy seems to facilitate the most positive experiences and possibilities for appearance.

The method presented by Hakomäki (2012), is focused on the musical and narrative compositions of the child, in this case Nick. These compositions are also shared with Nick's family, the music therapist, a family therapist, a child psychiatrist and his little sister's nanny. This allows Nick to appear as someone who can tell stories about his life, and someone who wants to share these stories with people close to him. The space of appearance that arises during Nick's performance also allows the audience to reveal to Nick their reactions to his stories, and to be a part of a shared moment that transcends the present.

Implications of understanding children's restlessness as participation in a space of appearance

If children's restlessness should be understood according to a bioecological theory of development, then perhaps it makes sense to think of restlessness as disruptions in the *interactions between* the evolving human organism that is the child and his or her surroundings? This means that if a child is restless it could be understood as expressed mismatch between the child's abilities, interests, motivation or ambitions and the availability of matching relations (persons, objects and symbols) in their immediate context. This availability of persons, objects and symbols are of course dependent on the surrounding ecological systems. Paul's restlessness changed as music became available to him through his newfound relation with one of the music therapy students (person), with the instruments that was brought to the kindergarten during the project (object) and as he was given the opportunity to create a dance and song (symbols) together with this friends. If this makes sense, then perhaps we should have less focus on minimising the expression of restlessness and spend more time

providing children with persons, objects and symbols that allow for a matching of experienced (endo) and shared (micro) vitality.

I use Hannah Arendt's concept *space of appearance* to illustrate and describe the relational and emergent nature of children's restlessness. Aina Olsvold (2012), who has conducted a series of in-depth interviews with children diagnosed with and medicated for ADHD, and their parents, uses Goffman's concept of *drama* to describe her overall impressions from the interviews. Her findings indicate that ADHD is not the children's project, and the way they talk about the diagnosis contrasts the way their mothers talk about the diagnosis. None of the children in her sample expressed relief over having been given an ADHD diagnosis, and they often talked about it negatively and as a threat to their identity. Olsvold writes (page 145, my translation):

> *For Jonas and for most of the children in this study, ADHD actualises what the American sociologist Erving Goffman so fittingly describes as the drama of normality and deviance. The seriousness of this drama has surprised me, even though I know that very few of us like to be categorised and that children prefer to be like other children. It is a drama that takes place on the inner and outer stage, in the inner and outer world. It is about identity, the personal and social identity, about who one is in one's own eyes and in the eyes of others.*

None of the children who participated in the community music therapy project had an ADHD diagnosis. However, the educational leaders worried that some of the boys described in paper 3 might struggle with sitting still and concentrating as they transitioned into the school system. By using the concepts of Arendt and Goffman, one might say that the pedagogical leaders worried about the ecological transition from one space of appearance to another, and the impact this transition could have on the drama unfolding on these boys' inner and outer stages regarding normality in the eyes of themselves and others.

7.3.2 Plurality as a condition for human action

The description of Paul in paper 3 is based on the observations and understandings of the music therapy students and myself. These descriptions carry in them our

observations, experiences, theoretical understandings and ideals. One such ideal is *plurality*. Arendt (1998) sees plurality as a condition of human action (page 8):

> *Action would be an unnecessary luxury, a capricious interference with general laws of behavior, if men were endlessly reproducible repetitions of the same model, whose nature or essence was the same for all and as predictable as the nature or essence of any other thing. Plurality is the condition of human action because we are all the same, that is, human, in such a way that nobody is ever the same as anyone else who ever lived, lives, or will live.*

Arendt's description of plurality as a basic condition for human action, can be related to the importance of acknowledging *uniqueness* as a basic quality of human beings and of human actions. However, by pointing out that human beings are not *endless reproducible repetitions of the same model*, she also points to the fact that we *share* this uniqueness. In a sense, this is a parallel to the relationship between the evolutionary development of the species (*phylogenesis*) and the development of the individual (*ontogenesis*). The development of every human foetus reflects the evolution of the human species, which is shared by all human beings. Simultaneously, every human being is also unique. Every child is a unique person with unique biological makeup that unfolds in unique relations to the surrounding environment. This means that as human beings, we have a *shared uniqueness*.

Arendt (1998) reflects on the relationship between the acting individual and the *web of relations* that already exist (page 233):

> *The realm of human affairs, strictly speaking, consists of the web of human relationships which exists wherever men live together. The disclosure of the "who" through speech, end the setting of a new beginning through action, always fall into an already existing web where their immediate consequences can be felt.*

In relation to children's restlessness, whenever the consequences of a child's behaviour are felt in a negative or positive way by others in the immediate setting, it not only reflects who the child is, but perhaps even more so it reflects the already existing web of relations. Arendt points out that this interaction between the acting individual and the "invisible" web of relationships that already exists, means that the

acting individual never really knows what he is doing. The acting individual becomes "guilty" of consequences that he or she never intended or even foresaw. Arendt also emphasises that the very meaning of one's actions never discloses itself to the actor, but that the meaning of an act can be observed and described by the historian (who himself does not act).

Without going further into the complexity of the relationship between human actions, the already existing web of relations and meaning, Arendt's understandings can create a frame for reflecting on the individual and problem-oriented perspectives and solutions conveyed by a diagnostic approach. Arendt's ideas can also have the effect of relieving guilt and shame from both children and adults, as the meaning and consequences of our actions can never be fully revealed to us. It can also have the effect of pointing to a shared responsibility for restlessness. These two functions, relieving guilt or shame and pointing to a shared responsibility can in some ways replace the need for an ADHD diagnosis. As discussed in paper 1 and 2, an ADHD diagnosis can act to relieve parents and teachers from guilt and shame. Also, the participants in the cooperative inquiry group (paper 2), discussed the importance of taking a shared responsibility for children's restlessness, and how an ADHD diagnosis could deflect focus and responsibility from the relation to the individual child.

7.4 Children and adults as subjects acting on each other

I have now reflected on children's restlessness in relation to Stern's concept of forms of vitality, and Arendt's concepts of action and space of appearance. I have argued that these concepts can allow us to understand children's restlessness in relation to action as inherently unpredictable and as a cooperative effort that takes place within a shared space of appearance. I have also reflected on how plurality can be understood as a condition for human action, and that this can have implications for how we understand children's restlessness. I will now return to the third research question of this thesis: *How can we understand children's restlessness on the premise that children and adults are subjects acting on each other?*

7.4.1 Possibilities and limitations in the context

In this thesis, I argue that children's restlessness can be understood as a bioecological phenomenon, and that these understandings can be seen as results of interactions between process, person, context and time. This ecological and multi-levelled approach to children's restlessness can be used to argue for complexity and cooperation where ADHD can offer simplicity and effective individual- and problem-oriented solutions. Complexity is challenging to contain, and cooperation is resource demanding. Especially if the resources in a context are limited or threatened, which seems often to be the case when children's restlessness call for a diagnosis and treatment. Under *The relationship between action and reflection in this thesis*, I describe how containing complexity and unpredictability can be experienced as challenging, frustrating and demanding. However, these struggles seem to be unavoidable if the aim is to facilitate complexity and cooperation, for instance in facilitating an integration of understandings (paper 2) or when accessing children's resources (paper 3).

The critical perspectives presented in paper 1 have allowed me to challenge the seemingly accepted idea in mainstream practice and research that adults are 'objective helpers' (paper 1). Adults can also be seen as invested subjects that have to negotiate between possibilities in the context and overarching structures like children's rights or ideals regarding normality and development. The discussions in the cooperative inquiry group (paper 2) can also be read as a description of such a process of negotiations. I will now reflect on the concept *increased possibilities for action* in relation to the findings presented in this thesis.

Possibilities for action

According to Ruud (1998, 2008) music therapy is aimed at increasing people's possibilities for action. This notion is based on a sociological understanding of health problems which is central to community music therapy (Stige & Aarø, 2012). Health is seen as not only a product of individual problems or resources, but as related to barriers and structures in the community, hereunder the availability of resources to

the person in question. In relation to children's restlessness, this could be for instance whether there is a centre for music therapy in the community, whether kindergarten teachers are able or willing to facilitate music-making in kindergarten, or the availability of musical instruments in a kindergarten and at home.

Stige proposes the following description of music therapy as an area of professional practice (Stige, 2003, page 454, in Stige & Aarø, 2012, page 15-16):

> *Community music therapy as an area of professional practice is situated health musicking in a community, as a planned process of collaboration between client and therapist with a specific focus upon promotion of sociocultural and communal change through a participatory approach where music as ecology of performed relationships is used in non-clinical and inclusive settings.*

This definition points to the many aspects of carrying out a community music therapy project, but also outlines community music therapy as a situated practice. The aim is to facilitate positive changes in individuals, but also in the community. Music is not the medicine that will improve the health of the individual, but a collaborative process that acts to increase possibilities and facilitate change through the mutual engagement of individual and community.

The community music therapy process described in paper 3, was not aimed at simply reducing the children's restlessness through the means of music. Neither the kindergarten staff and leader, nor we who visited the kindergarten during the project, had foreseen how challenging and dynamic facilitating a collaborative health musicking process would be. Like Arendt describes, we did not see the consequences of our initiated action. It became very clear to us during this process, that a successful performance very much relied on the collaborative efforts of the kindergarten staff, the children and ourselves. Like Arendt writes, we relied on their efforts to complete our initiated action (the music therapy project), just like the children relied on us to complete their initiated actions in creating the musical pieces for the performance.

According to Ruud (1998), increased possibilities for action is based on the assumption that health is a relational phenomenon. A good quality of life extends

beyond the individual to include community and culture, and there is a reciprocal influence between the individual and the collective levels. This definition of health is a good fit with the definition of restlessness presented in this thesis. It is also in line with understanding biological and psychological aspects of children's restlessness as relational. Health as a relational phenomenon, is central to what has often been called *the interpersonal approach* within mental health (see for instance Kiesler, 1991, or Kaslow 1996).

A relational concept of health means that a symptom or challenge that causes problems for one person in a one particular setting, does not necessarily cause problems for a person in a different setting (Stige & Aarø, 2012). The example given by Stige and Aarø is that mental health symptoms that would be disastrous for a businessperson working in a major city, could have only minor consequences for a farmer in a rural setting, and vice versa. This points to *function* as a relational and context-dependant concept.

Function is a central aspect when giving a child an ADHD diagnosis. The first diagnostic criteria listed in the DSM-5 is (page 59):

> *A persistent pattern of inattention and/or hyperactivity-impulsivity that interferes with functioning or development, as characterized by [inattention]and/or [hyperactivity/impulsivity].*

If health is a relational phenomenon, then 'functioning' and 'development' can also point to the context and the relations available in this context. For instance, epigenetic research points to the possibility of understanding children as differently susceptible to positive *and* negative experiences or qualities in the environment (Belsky et al., 2009). In relation to children's restlessness, I suggest a different metaphor than that of a businessman living in a city versus a farmer living in a rural area. In the *very same* context or micro system, for instance during the same music therapy session, a child that is socially very sensitive or creative can function very differently than a child that is not so socially sensitive or creative.

In our interactions with the children during the community music therapy project, they all reacted differently to the ‘same’ offer of participating through collaborative music-making; they all functioned differently in this shared space. For some, like Paul (paper 3), improvising musically allowed him to access resources and participate in a well-functioning manner. For others, like Paul’s friend John, musical improvisation and collaboration challenged his functioning during several of the music therapy sessions. However, by continuing to offer him a place in the group, thereby allowing a temporary ‘dysfunction’ on his behalf, the music therapy students gave John an opportunity to adjust and regain function in his own tempo and on his own terms (within the premises of the context).

In relation to the concept *possibilities for action*, my findings indicate that music therapy can offer children increased possibilities for action. However, my findings also indicate that for some children, these increased possibilities can be challenging, and even create a temporary dysfunction in the context. However, sustained positive encouragement and invitation can facilitate increased possibilities for action over time. This finding can be related to a study of children understood as at-risk of school failure. In a longitudinal study of teachers’ and children’s classroom behaviours, children reported as *at-risk* by their kindergarten teachers, had similar academic achievements and student-teacher relationships to that of low-risk peers at the end of the first school year *if* teachers provided them with strong instructional and emotional support (Hamre & Pianta, 2005). This way, children’s function can be seen as a relational development over time.

This understanding has implications for how we understand children’s function: *Are* children biologically determined to perform at different levels of function, as indicated by descriptions in the ADHD diagnosis? Do children *perform* at a certain level of function based on the context? By using the concept possibilities for action, one could say that a combination of these two stances would be that *certain possibilities for action are available to certain children at a certain time based on the availability of persons and objects in that context*.

Such an understanding of mental health problems in children would fit with findings that indicate that parental emotional well-being as well as parenting practices mediates the effects of low socio-economic status on child mental health problems (Bøe et al., 2014). It could also fit with *different susceptibility* (Belsky et al., 2009; Pluess & Belsky, 2010) as a frame for understanding the relationships between children's genetic make-up, environmental factors, and their behaviours. However, there is a need for more research on the situationally emergent and temporally variable nature of health (DeNora, 2013). In order to facilitate children's health and well-being, I would argue that there is a need for more research on the relationship between children's behaviours and the possibilities for action available to them in the immediate context and in the wider ecological context.

In relation to ADHD, it is unclear whether labelling certain behaviours as *hyperactive* or *impulsive* points to the importance of increasing or *decreasing* these children's possibilities for actions. On a similar note, reflexivity can be understood as a process of increasing adult's possibilities for *understanding*. A relational concept of health points to the importance of seeing the *relations between* individual's symptoms, functioning and the qualities and experiences offered to them by the contexts they live in. In contrast to understandings that focus on individual problems, seeing children's health as a relational phenomenon opens up new possibilities for actions not only for the children themselves, but also for the adults and systems that surround these children.

8. Strengths and limitations

In this thesis, I have described an explorative and reflexive process in which I have focused on understanding children's restlessness. A premise in this process has been that children's restlessness can be understood as a complex and relational phenomenon that is co-constituted by children and adults in a specific context. I have criticised ADHD as a frame for understanding children's restlessness, but I have also used the ADHD diagnosis and research on ADHD as a point of departure for my exploration and in order to relate my own critical exploration and reflection to mainstream research and practice.

Although I criticise the ADHD diagnosis, this thesis should not be read as an attempt to show that "ADHD does not exist". My methodological choices have been made with complexity, collaboration and ecology in mind. The methods I have used are not appropriate if the aim is to reduce complexity to a few variables, control the context and behaviours of those participating or to test hypotheses. My approach has been reflexive and hermeneutical, and my data have been collected from a relatively small number of participants in one context.

By presenting a wide body of research on ADHD, I have tried to show that it is possible to reflect on the usefulness and ethical aspects of understanding children's restlessness as ADHD, without even leaving this research field. My attempts to integrate post-positivist and social constructionist research have also been an exploration of possibilities and challenges of going beyond scientific demarcations.

Likewise, by inviting adults from different practice contexts to engage in a cooperative inquiry about children's restlessness, I have tried to bridge different understandings and challenge conventional understandings. My own participation in community music therapy has allowed me to explore and integrate my own understandings and experiences. It has also provided me with closeness to children's processes of exploring, (re-)establishing safety and integrating new experiences and understandings related to their own and other's contributions.

One challenge in reflecting on the relationship between the literature research and my own findings, has been ecological differences between these groups of participants. The literature research revealed that many restless children that attend music therapy are neglected and abused boys. In the music therapy project described in this thesis, the participants were both boys and girls who were (as far as I know) growing up under 'normal' circumstances. I cannot say this for sure, as I have not collected such information about them. This being said, I chose to include the most overtly restless boys to increase the similarities with the literature review.

Another limitation or challenge, has been to use *forms of vitality* as a contrast to the behavioural descriptions listed in the ADHD diagnosis. The data collected during the community music therapy project consisted of research diaries, interviews and video recordings. I only chose to video record the performances. At the time I suspected that recording the whole four-week process of creating a performance would be too resource demanding, leave me with too much data, and that it would be challenging to make selections during the data collection process as to which children to follow, as they often worked in smaller groups.

Looking back, I wonder whether even shorter video recordings of collaborative interactions during the process of creating the performances, could have enabled me to ground my reflections about vitality and action during this cooperative phase better in the data. In analysing the data, I have had to negotiate between resources, understandings and data available to me at the time, and the overarching aims and perspectives that I brought with me coming into this project.

In this thesis I have explored children's restlessness as a bioecological phenomenon. I have used this comprehensive summary as an opportunity to reflect on *how* children's restlessness can be understood as a bioecological phenomenon, and to outline some important reasons why it *should* be. I have needed space to outline these understandings and arguments, and I have therefore not prioritised to go further into the particular ecological systems that surround Norwegian kindergarten children. I have chosen to focus on the relational processes in which adults' understandings of

children's restless behaviours are created. This means I have had less time to explore the children's own perspectives, and to compare these perspectives with those of the adults. Children have the right to be heard, and we need more research on children's own perspectives in relation to ADHD and restlessness, and in relation to health and well-being in general. In this thesis, I have chosen to focus on adult understandings because *we* have the responsibility to understand and describe children in ways that contribute to their development and safety. Adult understandings, and their capacity to be reflexive in relation to these understandings, are imperative in creating better contexts for children and in relieving them of undue responsibility.

9. Conclusion

In this thesis I explore and reflect on children's restlessness. I have defined children's restlessness as *the label given to an experienced form of vitality that appears in the space between the described and the describer*. I conceptualise restlessness as a relational phenomenon that emerges in a certain context. The overarching aim of this thesis is to contribute to increased reflexivity in relation to children's restlessness.

9.1 A short discussion summary

I will now conclude by summing up the discussions related to each of the three research questions. I will then outline some possible implications for theory, research and practice.

1. *How can children's restlessness be understood as a bioecological phenomenon*?

According to the ecological systems model, the developing child is the centre of gravity in a dynamic process co-constituted by events that occur on several levels over time. The individual person is positioned as *the centre of gravity* also in the biopsychosocial model. I argue that adding two "new levels" to the ecological systems model, *endo* and *nano*, could facilitate a more precise integration of biopsychosocial findings into an ecological systems model. Adding these two levels could facilitate reflexivity regarding the ecologically interrelated and co-constituted nature of biological, psychological and social findings regarding children's restlessness.

2. *How can adults' understandings of children's restlessness be seen as a result of interactions between process, person, context and time?*

I discuss this by drawing on the concepts *forms of vitality*, *action* and *space of appearance*. Restlessness can be understood in terms of shape of movement, time, space and intention/directionality. Music therapy can be understood as a specific space of appearance, that for instance allowed several of the children described in the literature review to appear for themselves and others in particular way. An ecological

systems theory allows us to understand restlessness as disruptions in the interactions between the child and his or her surroundings. During the community music therapy research project, Paul's restlessness changed as new people, objects, and symbols became available to him. Children's restlessness can be understood on the premise they engage in a drama of normality and deviance, that takes place in a certain spaces of appearance.

Plurality can be seen as a condition for human action. Human beings have a shared uniqueness, and as individuals we are born into an already existing web of relations that partly determine the meaning and outcome of our actions. These understandings can act to relieve individuals from guilt and shame, which is seen as one important aspect of the ADHD diagnosis.

3. *How can we understand children's restlessness on the premise that children and adults are participating subjects acting on each other?*

Both adults and children relate to possibilities and limitations in the context. Rather than being objective or neutral observers and helpers, adults play an important role in facilitating children's possibilities for action. Health can be understood as a relational phenomenon which extends beyond the individual to include reciprocal influences between the individual and the collective levels. Function, which is central to the ADHD diagnosis, can also be stood as relational, and depending on the qualities in their bioecological systems, two different children will necessarily function differently in the same context. Music therapy is aimed at *increasing* children's possibilities for action. However, findings presented in this thesis, and concepts like *hyperactivity* and *impulsivity*, warrants more research on how music therapy can decrease children's possibilities for action, and whether there should be a more explicit focus on increasing *adults'* possibilities for action and understanding.

9.2 Concluding reflections

So what are the implications of understanding children's restlessness as a bioecological phenomenon that becomes visible during interactions between subjects in context over time?

A bioecological understanding can challenge basic assumptions about the objectivity and stability of adults' observations of children's restlessness. If it is relevant to understand children's restlessness as a bioecological phenomenon, one could question the validity and ethics of describing and treating children's restlessness as an individual problem in the here-and-now. Simultaneously, a bioecological approach to children's restlessness can outline new possibilities for action and understanding for both children and adults.

For instance, if a boy is restless because he is misunderstood, then it is possible to engage more sensitively with this child and offer him settings in which he can feel validated. In addition, it is possible to engage in reflexive conversations about how we understand boys with certain behaviours in certain settings, and how these understandings have developed over time and been shaped by culture and history. Over time, such reflections can affect the settings in which similar boys that are misunderstood in a similar way develop, so that subsequent generations are less misunderstood and can participate in more validating experiences.

A bioecological understanding could also challenge the way we diagnose individuals, by encouraging ecological perspectives and interventions. An ecological diagnostic approach would have to acknowledge the individual as the centre of gravity. The diagnostic process would have to build on the particular experiences and perspectives of that person. It would also have to carefully map the problems and resources relevant to that person, and initiate cooperative efforts with important persons and structures. In relation to ADHD, such a turn would call for used-led or user-involved diagnostic process, and it would depend on the surrounding adults' abilities to incorporate a child perspective and the child's own perspectives.

Such an *ecological turn* would have implications for research based on the biopsychosocial model, as Engel (1977) clearly states that this model centres on the expertise of the physician. At the same time, an ecological diagnosis would have to contain a complex network of relations between persons, processes, contexts, and time, and would have the challenge of pinning down a problem that was temporally and situationally dynamic.

A change in how we understand children's restlessness would necessarily have implications for how we talk about children's restlessness. For instance, words or phrases like *hyperactivity*, *impulsivity*, and *attention deficit* could be challenged by words and phrases like *hindered*, *overlooked*, *misunderstood*, *an undiscovered talent*, *funny, full of initiative, misplaced*, *abused*, *neglected*, *interested in something else*, or even *childish.* However, these words would bring a new set of associations and challenges, so the overarching aim would be to initiate discussions and conversations that allowed for an interplay between different understandings.

In this thesis I have not only explored the concept of children's restlessness, but I have throughout become increasingly interested in how adult's define and co-constitute children's restlessness. If adults are not only describers, but also co-creators of children's restlessness, it points to a need for reflexive and collaborative processes that involved both adults and children. The aim of such processes could be to explore and reflect on matches or mismatches between children's' needs and problems, and the resources, understandings, structures and objects made available to them by adults in the context. Such processes would also entail looking at the political aspects of how children's behaviours are allowed, supported, punished, and minimized, and how children's restlessness is exploited in for instance the marketing of therapies or medication.

As the ecological systems model also has a *chronos* dimension, it could be interesting to re-evaluate current theories, research and practice on the premise that children's restlessness is temporally variable and situationally emergent. This would also entail looking at how adult understandings and actions shape historical, cultural, and

philosophical truths about children. Further implications would include exploring the processes through which these truths are presented to children and transferred onto them.

In this thesis I have showed that it is possible to initiate collaborative and reflexive processes when one has a surplus of time and resources. But what about the everyday contexts in which children develop, where adults are often pressed for resources? As I have tried to illustrate in this thesis, reflexivity is quite likely to create unrest and confusion. The ADHD diagnosis offers clear and simple descriptions and solutions. Through the research presented in this thesis I have criticised this very aspect of the ADHD diagnosis, and challenged adults to contain complexity in the face of children's restlessness. For me personally, this has been a challenging aspect of doing this PhD, and it has taught me something about the co-dependant relationships between children, adults and their surrounding systems.

Is it possible to contain such increased complexity in practice? My experience is that these processes are *personally* engaging and revealing, which means that they need to be prioritised and supported. During this project, however, I am always reminded of the *systemic* aspects of such personal processes. Adults' ability to contain complexity depend on their own interest and courage. However, these processes are absolutely conditioned by the resources available to them, and by the collaborative efforts of others.

Literature

Achenbach, C. (2012). Nordoff-Robbins Music Therapy in a Nursery Setting. In J. Tomlinson, P. Derrington, & A. Oldfield (Eds.), *Music Therapy in Schools. Working with Children of All Ages in Mainstream and Special Education*. London and Philadelphia: Jessica Kingsley Publishers.

Ackerman, P. T., Newton, J. E. O., McPherson, W. B., Jones, J. G., & Dykman, R. A. (1998). Prevalence of post traumatic stress disorder and other psychiatric diagnoses in three groups of abused children (sexual, physical, and both). *Child Abuse & Neglect, 22*(8), 759-774. doi:http://dx.doi.org/10.1016/S0145-2134(98)00062-3

Aigen, K. (1991). Creative fantasy, music and lyric improvisation with a gifted acting-out boy. *Case studies in music therapy*, 109-126.

Alvesson, M., & Sköldberg, K. (2009). *Reflexive Methodology. New Vistas for Qualitative Research.* (Second edition ed.). London, Thousand Oaks, New Dehli, Singapore: Sage.

American Psychatric Association. (2013). *Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition*. Arlington, VA: American Psychiatric Association.

Andersson, H. W., Ådnanes, M., & Hatling, T. (2004). *SINTEF rapport: Nasjonal kartlegging av tilbud om diagnostisering og helhetlig behandling av barn og ungdom med hyperkinetiske forstyrrelser/ADHD*. Retrieved from https://www.sintef.no/globalassets/upload/helse/psykisk-helse/pdf-filer/stf78_a045012---nasjonal-kartlegging-adhd.pdf:

Ansdell, G. (2002). Community Music Therapy & The Winds of Change. *Voices: a World Forum for Music Therapy, 2*(2).

Arendt, H. (1998). *The Human Condition. With an Introduction by Margaret Conovan (2nd ed.)* (Second ed.). Chicago; London: The University of Chicago Press.

August, G., Realmuto, G., MacDonald, A., III, Nugent, S., & Crosby, R. (1996). Prevalence of ADHD and comorbid disorders among elementary school children screened for disruptive behavior. *Journal of Abnormal Child Psychology, 24*(5), 571-595. doi:10.1007/BF01670101

Baker, F., & Jones, C. (2006). The effect of music therapy services on classroom behaviours of newly arrived refugee students in Australia--A pilot study. *Emotional & Behavioural Difficulties, 11*(4), 249-260.

Barkley, R. A. (2002). International Consensus Statement on ADHD. *J Am Acad Child Adolesc Psychiatry, 41*(12), 1389. doi:10.1097/00004583-200212000-00001

Barkley, R. A. (2005). *ADHD and the nature of self-control*. New York, NY: The Guilford Press.

Belsky, J., Jonassaint, C., Pluess, M., Stanton, M., Brummett, B., & Williams, R. (2009). Vulnerability genes or plasticity genes? *Molecular Psychiatry, 14*, 746-754.

Binder, P.-E., Holgersen, H., & Moltu, C. (2012). Staying close and reflexive: An explorative and reflexive approach to qualitative research on psychotherapy. *Nordic Psychology, 64*(2), 103-117.

Braun, V., & Clarke, V. (2012). Using thematic analysis in psychology. *Qualitative Research in Psychology, 3*(2), 77-101.

Bronfenbrenner, U. (1979). *The ecology of human develpopment: Experiments by nature and design*. Cambridge, Massachusetts, and London, England: Harvard University Press.

Bronfenbrenner, U. (2005). The Bioecological Theory of Human Development In U. Bronfenbrenner (Ed.), *Making Human Beings Human. Biolecological Perspectives on Human Development*. Thousand Oaks, London, New Dehli: SAGE Publications.

Bruscia, K. E. (1991). *Case studies in music therapy*. Phoenixville: Barcelona.

Braarud, H. C., & Nordanger, D. Ø. (2011). Kompleks traumatisering hos barn: En utviklingspsykologisk forståelse. [Complex traumatisation in children: A developmental psychology understanding]. *Tidsskrift for Norsk Psykologforening, 48*(10), 968-972.

Burr, V. (2015). *Social Constructionism. Third Edition*. London and New York: Routledge.

Bøe, T. (2013). *Socioeconomic Status and Mental Health in Children and Adolescents.* (PhD), University of Bergen.

Bøe, T., Sivertsen, B., Heiervang, E., Goodman, R., Lundervold, A. J., & Hysing, M. (2014). Socioeconomic Status and Child Mental Health: The Role of Parental Emotional Well-Being and Parenting Practices. *Journal of Abnormal Child Psychology, 42*(5), 705-715. doi:10.1007/s10802-013-9818-9

Bøe, T., Øverland, S., Lundervold, A., & Hysing, M. (2012). Socioeconomic status and children's mental health: Results from the Bergen Child Study. *Social Psychiatry and Psychiatric Epidemiology, 47*(10), 1557-1566. doi:10.1007/s00127-011-0462-9

Camilleri, V. (2000). Music Therapy Groups: A Path to Social-Emotional Growth and Academic Success. *Educational Horizons, 78*(4), 184-189.

Chong, H. J., & Kim, S. J. (2010). Education-oriented music therapy as an after-school program for students with emotional and behavioral problems. *The Arts in Psychotherapy, 37*(3), 190-196.

Crijnen, A. A. M., Achenbach, T. M., & Verhulst, F. C. (1997). Comparisons of Problems Reported by Parents of Children in 12 Cultures: Total Problems, Externalizing, and Internalizing. *Journal of the American Academy of Child & Adolescent Psychiatry, 36*(9), 1269-1277. doi:http://dx.doi.org/10.1097/00004583-199709000-00020

Cruickshank, J. (Ed.) (2003). *Critical Realism: The difference it makes*. London and New York: Routledge.

Danermark, B., Ekström, M., Jakobson, L., & Karlsson, J. C. (2002). *Explaining society. An introduction to critical realism in the social sciences*. London: Routledge.

DeNora, T. (2013). "Time after time": A Quali-T method for assessing music's impact on well-being. *International Journal of Qualitative Studies on Health and Well-being, 8*(20611). doi:http://dx.doi.org/10.3402/qhw.v8i0.20611

Dos Santos, A. J. (2003). *Expression of roles in a closed music therapy group for high-functioning children with learning and/or attention deficit/hyperactivity disorders.* Retrieved from http://search.ebscohost.com/login.aspx?direct=true&db=rih&AN=2003-06867&site=ehost-live Available from EBSCOhost rih database.

Duncan, B. L., Miller, S. D., & Sparks, J. (2007). Common Factors and the Uncommon Heroism of Youth. *Psychotherapy in Australia, 13*(2), 34-43.

Ekeland, T.-J. (2006). Biologi som ideologi? [Biology as ideology?]. *Vardøger*(30), 65-85.

Engel, G. L. (1977). The need for a new medical model: A challenge for biomedicine. *Science, 196*(4286), 129-136.

Fuller-Thomson, E., Mehta, R., & Valeo, A. (2014). Establishing a link between Attention Deficit Disorder/Attention Deficit Hyperactivity Disorder and childhood physical abuse. *Journal of Aggression, Maltreatment & Trauma, 23*(2), 188-198. doi:10.1080/10926771.2014.873510

Ghaemi, S. N. (2009). The rise and fall of the biopsychosocial model. *The British Journal of Psychiatry, 195*(1), 3-4. doi:10.1192/bjp.bp.109.063859

Gold, C., Voracek, M., & Wigram, T. (2004). Effects of Music Therapy for Children and Adolescents with Psychopathology: A Meta-analysis. *Journal of Child Psychology and Psychiatry, 45*(6), 1054-1063.

Gooding, L. F. (2011). The effect of a music therapy social skills training program on improving social competence in children and adolescents with social skill deficits. *Journal of Music Therapy, 48*(4), 440-462.

Gooding, L. F. (2011). The effect of a music therapy social skills training program on improving social competence in children and adolescents with social skills deficits. *Journal of Music Therapy, 48*(4), 440-462.

Grbich, C. (2013). *Qualitative Datra Analysis: An Introduction. Second Edition*. London, Thousand Oaks, New Dehli, Singapore: SAGE.

Grøholt, B., Sommerschild, H., & Garløv, I. (2001). Hyperkinetiske forstyrrelser *Lærebok i barnepsykiatri* (pp. 131-147). Oslo: Universitetsforlaget.

Hakomäki, H. (2012). Storycomposing as a method in music therapy. A collaborative experiment with a young co-researcher. In G. Trondalen & K. Stensæth (Eds.), *Barn, musikk, helse. Skriftserie fra Senter for musikk og helse* (Vol. 3). Oslo: Norges Musikkhøyskole.

Hamre, B. K., & Pianta, R. C. (2005). Can Instructional and Emotional Support in the First-Grade Classroom Make a Difference for Children at Risk of School Failure? *Child Development, 76*(5), 949-967. doi:10.1111/j.1467-8624.2005.00889.x

Heelan, P. A. (1998). The scope of hermeneutics in natural science. *Studies in History and Philosophy of Science Part A, 29*(2), 273-298. doi:http://dx.doi.org/10.1016/S0039-3681(98)00002-8

Helle-Valle, A. (2014). How do we understand children's restlessness? A critique of the biopsychosocial model and ADHD as the dominating perspective in current understanding and treatment. *Voices: A world forum for music therapy, 14*(1).

Herman, F. (1991). The boy that nobody wanted: Creative experiences for a boy with severe emotional problems *Collected Work: Case studies in music therapy. Published by: Phoenixville, PA: Barcelona, 1991. ISBN: 978-0-9624080-1-4; 0-9624080-1-8. Pages: 99-108. (AN: 1992-11138).*

Heron, J., & Reason, P. (2001). The practice of co-operative inquiry: Research 'with' rather than 'on' people. In P. Reason & H. Bradbury (Eds.), *The handbook of action research* (pp. 144-154). London: SAGE Publications Ltd.

Hibben, J. (1991). Group music therapy with a classroom of 6-8 year-old hyperactive-learning disabled children. In K. E. Bruscia (Ed.), *Collected Work: Case studies in music therapy. Published by: Phoenixville, PA: Barcelona, 1991. ISBN: 978-0-9624080-1-4; 0-9624080-1-8. Pages: 175-189. (AN: 1992-11138).*

Jackson, N. A. (2003). A Survey of Music Therapy Methods and Their Role in the Treatment of Early Elementary School Children with ADHD. *Journal of Music Therapy, 40*(4), 302-323.

Jackson, N. A. (2003). A survey of music therapy methods and their role in the treatment of early elementary school children with ADHD. *Journal of Music Therapy, 40*(4), 302-323.

Johns, U. T. (2012). Vitalitetsformer i musikk. In G. Trondalen & K. Stensæth (Eds.), *Barn, musikk, helse* (Vol. 3). Oslo: Norges Musikkhøyskole.

Kloppen, K., Mæhle, M., Kvello, Ø., Haugland, S., & Breivik, K. (2014). Prevalence of intrafamilial child maltreatment in the Nordic countries: A review. *Child Abuse Review*, n/a-n/a. doi:10.1002/car.2324

Kolk, B. A. v. d. (2005). Developmental trauma disorder: Towards a rational diagnosis for chronically traumatized children. *Psychiatric Annals*.

Kristjansson, B. (2006). The making of Nordic childhoods. In J. Einarsdotter & J. Wagner (Eds.), *Nordic childhoods and early education*. Greenwich, CT: IAP.

Lerner, R. M. (2005). Urie Bronfenbrenner: Career Contributions of the Consummate Developmental Scientist. In U. Bronfenbrenner (Ed.), *Making Human Beings Human. Biolecological Perspectives on Human Development*. Thousand Oaks, London, New Dehli: SAGE Publications.

Limb, C. J., & Braun, A. R. (2008). Neural Substrates of Spontaneous Musical Performance: An fMRI Study of Jazz Improvisation. *PLoS ONE, 3*(2), e1679. doi:doi:10.1371/journal.pone.0001679

Malloch, S. N. (2000). Mothers and Infants and Communicative Musicality. *Musicae Scientiae, 3*(1 suppl), 29-57. doi:10.1177/10298649000030s104

Martin, E. A. (Ed.) (2015) Concise Medical Dictionary (9 ed.). New York, NY: Oxford University Press.

McCarty, B. C., McElfresh, C. T., Rice, S. V., & Wilson, S. J. (1978). The effect of contingent background music on inappropriate bus behavior. *Journal of Music Therapy, 15*(3), 150-156.

McFerran, K. (2009). Quenching a Desire for Power: The Role of Music Therapy for Adolescents with ADHD. *Australasian Journal of Special Education, 33*(1), 72-83.

McFerran, K. S., Hense, C., Medcalf, L., Murphy, M., & Fairchild, R. (2016). Integrating Emotions Into the Critical Interpretive Synthesis. *Qualitative Health Research, 1*(11). doi:DOI: 10.1177/1049732316639284

Menon, V., & Levitin, D. J. (2005). The rewards of music listening: Response and physiological connectivity of the mesolimbic system. *NeuroImage, 28*(1), 175-184. doi:http://dx.doi.org/10.1016/j.neuroimage.2005.05.053

Miller, E. B. (2007). Getting from psy-phy (psychophysiology) to medical policy via music and neurofeedback for ADHD children. *Dissertation Abstracts International: Section B: The Sciences and Engineering, 68*(3-B), 1977.

Miller, E. B. (2011). Theoretical considerations of bio-guided music therapy. *Voices: A world forum for music therapy, 11*(3).

Morton, W. A., & Stockton, G. G. (2000). Methylphenidate Abuse and Psychiatric Side Effects. *Primary Care Companion to The Journal of Clinical Psychiatry, 2*(5), 159-164.

Navarez, D., Panksepp, J., Schore, A. N., & Gleason, T. (2013). *Evolution, Early Experience and Human Development: from Research to Practice and Policy*. New York, NY: Oxford University Press.

Neufeld, P., & Foy, M. (2006). Historical reflections on the ascendancy of ADHD in North America, c. 1980 - c. 2005. *British Journal of Educational Studies, 54*(4), 449-470.

Nielsen, K., & Jørgensen, C. R. (2010). Patologisering af uro? In S. Brinkmann (Ed.), *Det diagnosticerede liv: sygdom uden grænser*. Aarhus: Forlaget Klim.

Novik, T. S., Hervas, A., Ralston, S. J., Dalsgaard, S., Rodrigues Pereira, R., & Lorenzo, M. J. (2006). Influence of gender on attention-deficit/hyperactivity disorder in Europe--ADORE. *Eur Child Adolesc Psychiatry, 15 Suppl 1*, I15-24. doi:10.1007/s00787-006-1003-z

Olsvold, A. (2012). *Når "ADHD" kommer inn døren: En psykososial undersøkelse av barns, mødres og fedres forståelse og opplevelse av ADHD-diagnose og -medisinering.* (PhD), Universitetet i Oslo.

Pluess, M., & Belsky, J. (2010). Children's differential susceptibility to effects of parenting. *Family Science, 1*(1), 14-25.

Polanczyk, G., Lima, M. S. d., Horta, B. L., Biederman, J., & Rohde, L. A. (2007). The Worldwide Prevalence of ADHD: A Systematic Review and Metaregression Analysis. *American Journal of Psychiatry, 164*(6), 942-948. doi:doi:10.1176/ajp.2007.164.6.942

Polanczyk, G. V., Willcutt, E. G., Salum, G. A., Kieling, C., & Rohde, L. A. (2014). ADHD prevalence estimates across three decades: an updated systematic review and meta-regression analysis. *International Journal of Epidemiology, 43*(2), 434-442. doi:10.1093/ije/dyt261

Randolph, J. (2009). A guide to writing the dissertation litterature review. *Practical Assessment, Research & Evaluation, 14*(13).

Reason, P., & Bradbury, H. (2006). *Handbook of Action Research*: SAGE Publications.

Rickson, D. J. (2002). Adam: A case study of an adolescent boy. *Annual journal of the New Zealand Society for Music Therapy*, 51-60.

Rickson, D. J. (2003). The boy with the glass flute. *Voices: A world forum for music therapy, 3*(2).

Rickson, D. J. (2006). Instructional and Improvisational Models of Music Therapy with Adolescents Who Have Attention Deficit Hyperactivity Disorder (ADHD): A Comparison of the Effects on Motor Impulsivity. *Journal of Music Therapy, 43*(1), 39-62.

Rickson, D. J., & McFerran, K. (2007). Music Therapy in Special Education: Where Are We Now? *Kairaranga, 8*(1), 40-47.

Rickson, D. J., & Watkins, W. (2003). Music therapy to promote prosocial behaviors in aggressive adolescent boys: A pilot study. *Journal of Music Therapy, 40*(4), 283-301.

Russell, G., Ford, T., Rosenberg, R., & Kelly, S. (2014). The association of attention deficit hyperactivity disorder with socioeconomic disadvantage: alternative explanations and evidence. *Journal of Child Psychology and Psychiatry, 55*(5), 436-445.

Ruud, E. (1998). *Music therapy: Improvisation, communication and culture*. Gilsum, NH: Barcelona Publishers.

Ruud, E. (2008). Music in Therapy: Increasing Possibilities for Action. *MAIA: Music & Arts in Action, 1*(1).

Sausser, S., & Waller, R. J. (2006). A model for music therapy with students with emotional and behavioral disorders. *The Arts in Psychotherapy, 33*(1), 1-10.

Singh, I. (2003). *Boys will be boys: Fathers' perspectives on ADHD symptoms, diagnosis, and drug treatment*. Retrieved from

Singh, I. (2004). Doing their jobs: mothering with Ritalin in a culture of mother-blame. *Social Science & Medicine, 59*(6), 1193-1205. doi:http://dx.doi.org/10.1016/j.socscimed.2004.01.011

Singh, I., Filipe, A., Bard, I., Bergey, M., & Baker, L. (2013). Globalization and cognitive enhancement: emerging social and ethical challenges for ADHD clinicians. *Current Psychiatry Report, 15*(385).

Sommer, D., Samuelsson, I. P., & Hundeide, K. (2010). *Child perspectives and children's perspectives in theory and practice* (Vol. 2). Dordrecht; Heidelberg; London; New York: Springer.

Sosial- og helsedirektoratet. (2005). *Veileder i diagnostikk og behandling av AD/HD*.

Stake, R. E. (1994). Case Studies. In N. K. Denzin & Y. S. Lincoln (Eds.), *The SAGE Handbook of Qualitative Research*. London: SAGE.

Steele, A. L., Vaughan, M., & Dolan, C. (1976). The School Support Program: Music therapy for adjustment problems in elementary schools. *Journal of Music Therapy, 13*(2), 87-100.

Stern, D. N. (2010). *Forms of Vitality: Exploring Dynamic Experience in Psychology, the Arts, Psychotherapy, and Development*. Oxford: Oxford University Press.

Stige, B., & Aarø, L. E. (2012). *Invitation to community music therapy*. New York: Routledge.

Stoltenborgh, M., Bakermans-Kranenburg, M. J., Alink, L. R., & van Ijzendoorn, M. H. (2015). The prevalence of child maltreatment across the globe: Review of a series of meta-analyses. *Child Abuse Review, 24*(1), 37-50. doi:http://dx.doi.org/10.1002/car.2353

Thorkildsen, I. M. (2015). *Du ser det ikke før du tror det. Et kampskrift for barns rettigheter*: Vigmostad & Bjørke.

Timimi, S. (2005). *Naughty boys: anti-social behaviour, ADHD and the role of culture*. Hampshire, UK, and NY, USA: Palgrave McMillan.

Tomlinson, J., Derrington, P., & Oldfield, A. (2012). *Music Therapy in Schools: Working with Children of All Ages in Mainstream and Special Education*. Retrieved from Jessica Kingsley Publishers. 400 Market Street Suite 400, Philadelphia, PA 19106. Tel: 866-416-1078:

Trevarthen, C. (2000). Musicality and the Intrinsic Motive Pulse: Evidence from Human Psychobiology and Infant Communication. *Musicae Scientiae, 3*(1 suppl), 155-215. doi:10.1177/10298649000030s109

Trondalen, G., & Stensæt, K. (2012). *Barn, Musikk, Helse. Skriftserie fra Senter for musikk og helse* (Vol. 3). Oslo: Norwegian Academy of Music.

Vaidya, C. J., & Stollstorff, M. (2008). Cognitive neuroscience of Attention Deficit Hyperactivity Disorder: Current status and working hypotheses. *Developmental Disabilities Research Reviews, 14*(4), 261-267. doi:10.1002/ddrr.40

Williams, R. B. (1975). Music Therapy: How It Helps The Child. *Journal of the International Association of Pupil Personnel Workers, 19*(2), 74-79.

Wolfe, D. E. (1982). The effect of interrupted and continuous music on bodily movement and task performance of third grade students. *Journal of Music Therapy, 19*(2), 74-85.

Yin, R. K. (2014). *Case Study Research: Design and Methods. Fifth Edition*. Los Angeles, London, New Dehli, Singapore and Washington DC: SAGE Publications.

10. Appendices

10.1 Search strategy

Table 1: Search strategy

Music Therapy	**Restlessness**
Music* Music therapy/ Music/	Attention deficit disorder with hyperactivity Attention deficit disorder ADHD ADD Hyperactiv* Hyperkine* Restless* Unrest* Impulsiv* Minimal brain disorders DAMP Deficits in attention, motor control and perception

10.2 Results of the literature search

Table 2: Results and final results

Database	**Primary search**	**Supplementary search**	**First round of exclusion**	**Second round of exclusion**
PsychINFO	317			
MEDLINE	150			
Ovid Nursing	1			
Web of Science	259			
ERIC	353			
RILM	707			
ERIC SU	70			
Nordart		0		
Google Scholar		3		
Idunn		0		
Pubpsych		0		
"Cited by"		2		
"Reference list"		5		
Included:	1857			
- Duplicates	219			
Included	1638	10	1648	
Excluded			1550	
Included			98	98
Excluded				72
Final inclusion				**26**

10.3 Ethical approval by Regional Ethics Committee

Region:	Saksbehandler:	Telefon:	Vår dato:	Vår referanse:
REK vest	Anne Berit Kolmannskog	55978496	04.09.2013	2013/1281/REK vest
			Deres dato:	Deres referanse:
			25.06.2013	

Vår referanse må oppgis ved alle henvendelser

Anna Helle-Valle
Universitetet i Bergen

2013/1281 Barn og uro - forståelse og musikkterapeutisk praksis knyttet til barn i barnehagealder med uroproblematikk

Forskningsansvarlig: Universitetet i Bergen
Prosjektleder: Anna Helle-Valle

Vi viser til søknad om forhåndsgodkjenning av ovennevnte forskningsprosjekt. Søknaden ble behandlet av Regional komité for medisinsk og helsefaglig forskningsetikk (REK vest) i møtet 15.08.2013. Vurderingen er gjort med hjemmel i helseforskningsloven (hfl.) § 10, jf. forskningsetikklovens § 4.

Prosjektomtale
Dette samarbeidsprosjektet har som mål å undersøke uro som fenomen hos barn i barnehagealder, samt å se nærmere på musikkterapi som en ressurs i arbeidet med urolige barn i barnehager. Det vil bli gjennomført deltakende observasjon i musikkterapitimer i utvalgte barnehager der uro er en uttalt problematikk. Det vil også bli gjennomført fokusgrupper blant foreldre og ansatte i barnehager og helsevesen. Materialet vil bli analysert kvalitativt. Doktorgradsprosjektet finansieres av Det humanistisk fakultet ved Universitetet i Bergen og er tilknyttet GAMUT ved Griegakademiet, i samarbeid med Regionalt kompetansesenter for barn og unge (RKBU) og Allmennmedisinsk forskningsenhet ved Uni Helse.

Vurdering
Komiteen mener problemstillingen i prosjektet er interessant og ser behovet for å fremskaffe mer kunnskap om hvordan urolige barn blir oppfattet og møtt i dagens samfunn. Komiteen har ingen innvendinger til hvordan prosjektet er tenkt gjennomført og aksepterer deltakende observasjon i denne settingen.

Rekruttering
Rekrutteringsprosedyrene må imidlertid presiseres og sikre at forelder og barn er godt informert om prosjektet og prosjektlederes tilstedeværelse i de aktuelle barnehagene. Potensielle deltakere må kontaktes via barnehagene og foreldrene må aktivt samtykke til at datainnsamlingen kan gjennomføres før aktuelle barn kontaktes. Alle foreldre til barn som deltar i de aktuelle musikktimene, ikke bare de med uttalt uro, må informeres og samtykke til at observasjonene kan gjennomføres.

Informasjonsskrivet
Den skriftlige informasjonen som gis om prosjektet er preget av forskerens kritiske syn på dagens behandling av urolig barn. Denne forforståelsen er bakgrunn for at nettopp dette prosjektet settes i gang, men den kan oppfattes ledende og skape engstelse hos foreldre som mottar skrivet. En forespørsel om å delta i et forskningsprosjekt må fremstilles så nøytralt som mulig i forhold til hva forskningsresultatene kan

Besøksadresse:
Haukeland Universitetssykehus, Sentralblokken, 2. etg, Rom 4617

Telefon: 55975000
E-post: rek-vest@uib.no
Web: http://helseforskning.etikkom.no/

All post og e-post som inngår i saksbehandlingen, bes adressert til REK vest og ikke til enkelte personer

Kindly address all mail and e-mails to the Regional Ethics Committee, REK vest, not to individual staff

frembringe av ny kunnskap. Komiteen ber derfor at bakgrunn for studien tones ned i skrivet og at prosjektleder heller sier noe mer om hva deltakelse vil innebære for den enkelte, for eksempel noe mer om omfanget av forskers tilstedeværelse og mer om hvilke data som lagres.

Informasjonssikkerhet
Forskningsdata skal lagres i samsvar med Universitetet i Bergen sine interne retningslinjer for sikker datalagring. Personidentifiserbare forskningsdata skal slettes eller anonymiseres straks det ikke lenger er behov for dem og senest 5 år etter prosjektslutt. Ved eventuelt behov for lengre oppbevaring, må det sendes en velbegrunnet endringssøknad til REK. Prosjektgodkjenningen gjelder til prosjektslutt satt til 15.08.2016.

Vilkår
Informasjonsskrivet må forbedres og den reviderte utgaven må sendes til REK Vest.

Vedtak
REK Vest godkjenner prosjektet på betingelse av at ovennevnte vilkår tas til følge.

Sluttmelding og søknad om prosjektendring
Prosjektleder skal sende sluttmelding til REK vest på eget skjema senest 15.02.2017, jf. hfl. 12. Prosjektleder skal sende søknad om prosjektendring til REK vest dersom det skal gjøres vesentlige endringer i forhold til de opplysninger som er gitt i søknaden, jf. hfl. § 11.

Klageadgang
Du kan klage på komiteens vedtak, jf. forvaltningslovens § 28 flg. Klagen sendes til REK vest. Klagefristen er tre uker fra du mottar dette brevet. Dersom vedtaket opprettholdes av REK vest, sendes klagen videre til Den nasjonale forskningsetiske komité for medisin og helsefag for endelig vurdering.

Med vennlig hilsen

Ansgar Berg
Dr.med
Komitéleder

Anne Berit Kolmannskog
sekretariatsleder

Kopi til: postmottak@uib.no

10.4 Informed consent sheet cooperative inquiry group

Informasjonsskriv og samtykkeskjema

Forespørsel om deltakelse i forskningsprosjektet

"Musikkterapi i barnehagen: en annerledes måte å møte uro på?"

Bakgrunn og hensikt
Dette er et spørsmål til **deg** om å delta i en forskningsstudie om barn og uro i barnehagen. Formålet med studien er å belyse uro hos barn i barnehagealder og å utvikle mer kunnskap om musikkterapi som aktuelt tilbud i barnehagen. Generelt sett er hensikten med prosjektet å løfte frem perspektiver som kan utdype, nyansere og i bred forstand bidra til å forbedre dagens forståelse og praksis. Musikkterapi vil spesifikt undersøkes som en arena for å uttrykke og jobbe med uro i samarbeid med barnet og de voksne som omgir det, med tydelig fokus på ressurser.

Forskningsprosjektet er et doktorgradsprosjekt finansiert av Humanistisk Fakultet ved Universitetet i Bergen og knyttet til GAMUT/Griegakademiet i samarbeid med Regionalt kompetansesenter for barn og unge (RKBU) og Allmennmedisinsk forskningsenhet (AFE) ved Uni Helse/Uni Research.

Hva innebærer studien?
Forskningsprosjektet vil bli gjennomført i form av deltakende observasjon i musikkterapiprosjekt i barnehage, samt gjennom en praksisforbedringsgruppe med voksne som omgir disse barna. Er du mottaker av dette skjemaet, ønskes du som deltaker i en **praksisforbedringsgruppe**.

Musikkterapi i barnehagen – barnas perspektiv
Med deltakende observasjon, menes at forskeren skal delta i og observere et musikkterapeutisk prosjekt som gjennomføres i samspill med musikkterapeut som jobber i barnehagen. Dette musikkterapiprosjektet vil organiseres som en del av musikkterapistudentenes praksis i barnehagen, der barn både med og uten uttalt uroproblematikk deltar i musikkaktiviteter, skriver sanger om uro og får mulighet til å fremføre disse for foreldre og andre aktuelle voksne ved prosjektets slutt. Det vil være fokus på barnas ressurser og vi er ute etter å få tak i deres perspektiver på uro som opplevd fenomen.

Praksisforbedringsgruppe – de voksnes perspektiv
Denne gruppen skal fungere som et forum for å diskutere og forbedre praksis knyttet til barn og uro slik foreldre og andre involverte voksne opplever det. Det vil være et spesifikt fokus på musikkterapi i barnehagen, men også på hvordan barn og voksne kan bruke musikk som en ressurs i hverdagen. Foreldre, ansatte i barnehagen, barne- og ungdomspsykiatrisk poliklinikk (BUP), pedagogisk-psykologisk tjeneste (PPT), samt musikkterapeuter som jobber i barnehagen vil inviteres til å dele sine erfaringer og komme med forslag til forbedringer av dagens praksis. Gruppen tar sikte på å møtes fire ganger i løpet av et år med en tidsramme på to timer. Det vil bli tatt lydopptak av gruppemøtene, og disse vil bli transkribert anonymt og deretter slettet. Resultatene vil bli formidlet anonymisert, slik at andre ikke skal kunne gjenkjenne enkeltbidrag eller kunne identifisere de som har deltatt i praksisforbedringsgruppen.

Mulige fordeler og ulemper
Det er vanskelig å forutsi den enkeltes opplevelse av å delta i en praksisforbedringsgruppe. For noen kan dette oppleves som en interessant måte å diskutere et vanskelig tema som berører. Det kan også være positivt å bidra til at debatten på feltet utvides og gis utfyllende perspektiv. For andre kan det være utfordrende å dele egne erfaringer og synspunkt på et tema som for de fleste er emosjonelt engasjerende. Det kan også være en utfordring å få anledning til å bidra til endring, men at denne endringen kan oppleves å gå sakte.

Informasjonsskriv og samtykkeskjema

Hvordan forholder studien seg til personlig informasjon? Det vil ikke bli samlet inn personinfo utover navn og kontaktinformasjon som telefonnummer, email og arbeidssted. Dette skal brukes til å koordinere møtene i praksisforbedringsgruppen og formidle opplysninger i forbindelse med forskningsprosjektet, og vil bli slettet når det ikke lenger er behov for en slik kontakt. Navn eller annen identifiserende personinformasjon vil ikke bli gjengitt i publisert forskningsmateriale.

Frivillig deltakelse
Det er frivillig å delta i studien. Du kan når som helst og uten å oppgi noen grunn trekke ditt samtykke til å delta i studien. Dersom du ønsker å delta, undertegner du samtykkeerklæringen på siste side. Dersom du senere ønsker å trekke deg eller har spørsmål til studien, kan du kontakte forsker og prosjektkoordinator Anna Helle-Valle på mail anna.helle-valle@grieg.uib.no eller på telefon 465 47 232

Samtykke til deltakelse i studien

Jeg er villig til å delta i studien

(Signert av prosjektdeltaker, dato)

Jeg bekrefter å ha gitt informasjon om studien

(Signert prosjektleder, dato)

10.5 Informed consent sheet Community Music Therapy

Informasjonsskriv og samtykkeskjema

Forespørsel om deltakelse i forskningsprosjektet

"Musikkterapi i barnehagen: en annerledes måte å møte uro på?"

Bakgrunn og hensikt
Dette er et spørsmål til **barnet ditt** om å delta i en forskningsstudie om barn og uro i barnehagen. Formålet med studien er å belyse uro hos barn i barnehagealder og å utvikle mer kunnskap om musikkterapi som aktuelt tilbud i barnehagen. Generelt sett er hensikten med prosjektet å løfte frem perspektiver som kan utdype, nyansere og i bred forstand bidra til å forbedre dagens forståelse og praksis. Musikkterapi vil spesifikt undersøkes som en arena for å uttrykke og jobbe med uro i samarbeid med barnet og de voksne som omgir det, med tydelig fokus på ressurser.

Forskningsprosjektet er et doktorgradsprosjekt finansiert av Humanistisk Fakultet ved Universitetet i Bergen og knyttet til GAMUT/Griegakademiet i samarbeid med Regionalt kompetansesenter for barn og unge (RKBU) og Allmennmedisinsk forskningsenhet (AFE) ved Uni Helse/Uni Research.

Hva innebærer studien?
Forskningsprosjektet vil bli gjennomført i form av deltakende observasjon i musikkterapiprosjekt i barnehage, samt gjennom en praksisforbedringsgruppe med voksne som omgir disse barna. Er du mottaker av dette skjemaet, ønskes barnet ditt som deltaker i **musikkterapi i barnehagen**.

Musikkterapi i barnehagen – barnas perspektiv
Med deltakende observasjon, menes at forskeren skal delta i og observere et musikkterapeutisk prosjekt som gjennomføres i samspill med musikkterapeut som jobber i barnehagen. Dette musikkterapiprosjektet vil organiseres som en del av musikkterapistudentenes praksis i barnehagen, der barn både med og uten uttalt uroproblematikk deltar i musikkaktiviteter, skriver sanger om uro og får mulighet til å fremføre disse for foreldre og andre aktuelle voksne ved prosjektets slutt. Det vil være fokus på barnas ressurser og vi er ute etter å få tak i deres perspektiver på uro som opplevd fenomen.

Praksisforbedringsgruppe – de voksnes perspektiv
Denne gruppen skal fungere som et forum for å diskutere og forbedre praksis knyttet til barn og uro slik foreldre og andre involverte voksne opplever det. Det vil være et spesifikt fokus på musikkterapi i barnehagen, men også på hvordan barn og voksne kan bruke musikk som en ressurs i hverdagen. Foreldre, ansatte i barnehagen, barne- og ungdomspsykiatrisk poliklinikk (BUP), pedagogisk-psykologisk tjeneste (PPT), samt musikkterapeuter som jobber i barnehagen vil inviteres til å dele sine erfaringer og komme med forslag til forbedringer av dagens praksis. Gruppen tar sikte på å møtes fire ganger i løpet av et år med en tidsramme på to timer. Det vil bli tatt lydopptak av gruppemøtene, og disse vil bli transkribert anonymt og deretter slettet. Resultatene vil bli formidlet anonymisert, slik at andre ikke skal kunne gjenkjenne enkeltbidrag eller kunne identifisere de som har deltatt i praksisforbedringsgruppen.

Mulige fordeler og ulemper
Det er vanskelig å forutsi den enkeltes opplevelse av å delta i en praksisforbedringsgruppe. For noen kan dette oppleves som en interessant måte å diskutere et vanskelig tema som berører. Det kan også være positivt å bidra til at debatten på feltet utvides og gis utfyllende perspektiv. For andre kan det være utfordrende å dele egne erfaringer og synspunkt på et tema som for de fleste er emosjonelt engasjerende. Det kan også være en utfordring å få anledning til å bidra til endring, men at denne endringen kan oppleves å gå sakte.

Informasjonsskriv og samtykkeskjema

Hvordan forholder studien seg til personlig informasjon? Det vil ikke bli samlet inn personinfo utover navn og kontaktinformasjon som telefonnummer, email og arbeidssted. Dette skal brukes til å koordinere møtene i praksisforbedringsgruppen og formidle opplysninger i forbindelse med forskningsprosjektet, og vil bli slettet når det ikke lenger er behov for en slik kontakt. Navn eller annen identifiserende personinformasjon vil ikke bli gjengitt i publisert forskningsmateriale.

Frivillig deltakelse
Det er frivillig å delta i studien. Du kan når som helst og uten å oppgi noen grunn trekke ditt samtykke til å delta i studien. Dersom du ønsker å delta, undertegner du samtykkeerklæringen på siste side. Dersom du senere ønsker å trekke deg eller har spørsmål til studien, kan du kontakte forsker og prosjektkoordinator Anna Helle-Valle på mail anna.helle-valle@grieg.uib.no eller på telefon 465 47 232

Samtykke til deltakelse i studien

Jeg er villig til å la mitt barn delta i studien

(Signert av prosjektdeltaker, dato)

Jeg bekrefter å ha gitt informasjon om studien

(Signert prosjektleder, dato)

I

Voices: A World Forum for Music Therapy, Vol 14, No 1 (2014)

[Research Voices: Theoretical Studies]

How Do We Understand Children's Restlessness? A Critique of the Biopsychosocial Model and ADHD as the Dominating Perspective in Current Understanding and Treatment

By Anna Helle-Valle

Abstract

How is children's restlessness understood and handled by surrounding adults? Two approaches are outlined in this article: one is the biomedical and later the biopsychosocial model, the other is a tradition that can be traced back to Foucault's concept of historical ontology. The biopsychosocial model and ADHD is currently the dominating perspective when it comes to describing, understanding and treating restlessness in children. In this tradition, a focus on pathology and biology places the root of the problem within the child and positions the surrounding adults as neutral observers and helpers. By contrast, historical ontology opens up to questions about the neutrality and validity of a biopsychosocial approach by pointing to our active role as subjects in creating ideas of truth about children, in judging their behaviour and in "helping" them. Rather than claiming that one approach is better than the other, it can be useful to regard the two traditions as providing different levels of analysis and be aware of the possibilities and limitations pertaining to these.

What is a "normal" child? Who has the right to decide what is normal? Why? What are the consequences of our adult expert conceptualisations of normality for the child? These broad and basic questions seem almost impossible to answer. At the same time, they reflect an attitude of fundamental curiosity that has a central position in my research approach to children's restlessness.

I am rather new to the field of music therapy. My background is in psychology, but I am currently doing a Ph.D. on music therapy in a kindergarten in Bergen, Norway. The transition from psychology to music therapy has provided me with an inspiring distance to my own profession and clinical tradition, and simultaneously challenged me to adapt to a different, but related tradition of theory and practice. In my Ph.D. project I am investigating restlessness as a concept from normality to pathology. I am not sure when or how this topic became a research interest for me. In one way, restlessness has always been a part of what I consider normal. Growing up with a doctor/comedian/musician father and a feminist mother, I was allowed great freedom in exploring, expressing and discussing different aspects of normality. To me, restlessness represents a drive, a pulse and a way of being. Looking back, especially after writing this article, I see that I have really struggled with my own process of becoming a clinical or research "expert." For instance, acquiring and using the language that entails so-called objective descriptions of human behaviour has at times been an emotional and intellectual struggle. Doing an interdisciplinary Ph.D. on restlessness has allowed me to challenge this categorical language and way of thinking.

To be concrete, the Ph.D. project consists of two parts that are carried out in parallel in the same kindergarten: a semi-structured improvisation based song writing project about restlessness with the five year old children, and a group for practice improvement informed by action research (Reason & Bradbury, 2006). The second group consists of adults that are involved in the kindergarten as parents or professionals, including three parents, two educational supervisors, the head of kindergarten, two music therapists, a clinical social worker from the youth and children¹s mental health services, a clinical psychologist from the educational-psychological service and a general practitioner. The practice improvement group will discuss how we understand and handle restlessness in kindergarten, and they will watch a performance by the five year olds as part of that process.

ADHD is currently the most prevalent childhood mental health diagnosis, and is thus a central factor in how we view and rate children in our society. The perspectives on ideals regarding child personality or behaviour, disease and health are closely connected to a biomedical or biopsychosocial model of pathology, and the diagnostic culture involved in giving a child an ADHD diagnosis has roots back to the early 1900's. This makes ADHD not only a mental health diagnosis, but also a historical and

cultural phenomenon and an idea of truth through which the adult authorities can describe and act upon children. Neufeld and Foy (Neufeld & Foy, 2006) has used Ian Hacking's conceptual analysis as a means of discovering and discussing the historicity of ADHD. I will use Hacking's (Hacking, 2002) concept of historicity in a similar way to Neufeld and Foy, but relate it to a Norwegian context. My analysis includes an email correspondence with representatives from the National Centre for ADHD, Tourette's syndrome and Narcolepsy (Nasjonalt kompetansesenter for ADHD, Tourette's syndrome og Narkolepsi) that I will refer to as NK-ADHD. In this essay, the correspondence with NK-ADHD serves as a concrete example of how ADHD has established itself as a powerful frame of understanding and treatment in a Norwegian clinical context and as a political health issue. The question discussed in this essay is: How do we understand children's restlessness?

A Short Contextualisation

How we understand and handle the restlessness displayed by children is a question that can be investigated in many contexts and from different theoretical and practical angles. In this text I write from a position that is interdisciplinary, but at the same time quite specific and concrete. Apart from the fact that I am a psychologist doing a Ph.D. on music therapy, the interdisciplinary aspect of this text is reflected in the desire to pose some questions and outline some answers that are relevant to all adults working with children in a kindergarten, school or health care setting. The essay questions a tradition of understanding and practice related to children's restlessness that has developed alongside the emergence of a biopsychosocial model. The definition of the biopsychosocial model used in this text is based on a renowned article by Engel (Engel, 1977) where he introduced the biopsychosocial model as both an expansion and critique of the biomedical model. According to his view, an understanding and practice based on a biomedical model was to blame for the lack of coherence between medical expertise and good patient care, representing a crisis in medicine and psychiatry. Engel's argument was that descriptions of disease must also include descriptions of illness on a social, psychological and behaviour level (Engel, 1977). In this sense, the biopsychosocial model represents a break from the biomedical model. However, both focus on pathology, and although the biopsychosocial approach entails subjective descriptions of illness on various levels, these descriptions are still tied to the *patient*. A patient can be understood as a person that is subjected to expert descriptions and that is the focus of treatment and change. In this sense, Engel's article both criticises and reinforces the power relations and process of objectification that comes with being a patient. Using the word *client* instead of patient can be an example of breaking with, but relating to a biomedical/biopsychosocial model of health.

Definitions of ADHD

Attention-deficit/hyperactivity disorder (ADHD) is currently the most prevalent childhood mental health diagnosis (Ullebø, 2010). The disorder is described by a set of symptoms relating to behaviour, divided into three main groups: problems with concentration/attention, hyperactivity and impulsivity. Examples of symptoms listed in the DSM-5 under the different categories are as follows.

- Inattention: often fails to give close attention to details or makes careless mistakes in schoolwork, work or other activities
- Hyperactivity: often fidgets with hands or squirms in seat
- Impulsivity: often blurts out answers before questions have been completed.

The child should have at least six symptoms that have persisted in the last six months, and the symptoms should be maladaptive and not match the child's developmental level (American Psychatric Association, 2013).

The diagnostic process is normally initiated by a GP or someone within the educational-psychological service, based on concerns presented by the school or parents. Subjective reports made by teachers and parents play a central role in this process. Health personnel that are qualified to diagnose mental and neurological disorders are responsible for how the condition is treated and followed up (Sosial- og helsedirektoratet, 2005).

The ADHD diagnosis was first included in the Diagnostic and Statistical Manual (DSM) of the American Psychiatric Association in 1980 (Neufeld & Foy, 2006). WHO's International Statistical Classification of Mental and Behavioural Disorders (ICD-10) (World Health Organization, 1992) has been used in Norwegian psychiatric clinical contexts since 1997. The corresponding diagnosis to ADHD in the ICD-10 manual is F90 Hyperkinetic Disorder (HKD). This diagnosis is classified as an early onset behavioural and emotional disorder, and is associated with impairment of cognitive function and specific delays in motor and language development. HKD can broadly be seen as an extreme version of ADHD, and has thus lower prevalence (Neufeld & Foy, 2006).

ADHD in Norway

How common the disorder is relies on the diagnostic criteria used. ADHD can more easily be applied as a pathological label for unwanted child behaviour than HKD. ADHD is also the term that is most often used, both in professional and lay settings, as well as in popular culture. One example is a popular t-shirt with a print based on the logo of AC/DC, which reads AD/HD (figure 1).

In spite of ICD-10 (HKD) being the official standard for diagnostic practice in Norwegian child psychiatry, several examples exist

where the DSM-IV (ADHD) has been used as the communicative term for diagnosing mental disorders in children. One example is the National Centre for ADHD, Tourette's syndrome and Narcolepsy (NK-ADHD). The centre is organised as a part of Oslo University Hospital, and is fully financed by the Ministry for Health and Care Services. Their mandate, as regulated by law, entails building and spreading competency and knowledge about treatment to professionals and users, and to help implement knowledge based practice (Helse og omsorgsdepartementet, 2010).

Figure 1. T-shirt with a print based on the logo of AC/DC, which reads AD/HD. Photo: Anna Helle-Valle.

In spite of operating in a Norwegian clinical context, NK-ADHD has integrated the DSM-IV term ADHD in their title. ADHD is also used as a headline in the column frequently asked questions (FAQ) that can be found on their web page (www.nasjkomp.no). The FAQ column acts directly as a means of spreading information about updated knowledge, and indirectly as an illustration or mediation of the perspective of the centre. One of the questions reads as follows: "Can the brain take damage from the use of ADHD medication?" The leader of the centre, who has a background in teaching and special education, answers the question with the following response. "Very many people have since the fifties used these medications, often for many years. There is nothing that indicates that brain tissue or the chemical processes in the brain have taken damage from the treatment."

Whether such an answer reflects the format of the column, or a serious effort to sum up a complicated research field, is unclear. With this lack of clarity in mind, I formulated an email to the leader, with a copy to the head physician and the centre's psychologist with experience from neurology. In the email I stated my background as a psychologist and current position as a Ph.D. student (Personal communication with NK-ADHD, 2011). In the email I repeated the FAQ-answer above, and asked why known side-effects and uncertainty about long term effects, as described by the Norwegian Medicines Agency (Statens legemiddelverk, 2009), were not mentioned. The email also referred to a comment made by the UN's Commission for Children in 2010 (Barne- likestillings- og inkluderingsdepartementet, 2010), that expressed concern about the wide spread use of ADHD medications in Norway.

Based on the hypothesis that ADHD is caused by hypoactivation of dopamine systems in the brain, a powerful central stimulant is tested on the patient. The drug is "tested" because there are no objective measures that can clarify whether the child really has a dopamine deficiency. Symptoms of restlessness as perceived by adults and teachers, along with the observations of the clinician, are the only evidence available. If the symptoms as listed in the diagnosis are reduced, than the test is considered a success. Methylphenidate is most commonly used, and is sold under the names Ritalin, Concerta or Equacym. The drug acts by reducing restlessness, impulsive actions and improving ability to concentrate. Known side effects are disturbance of sleep, loss of appetite, depression, suicidal thoughts or behaviour, psychosis and manic episodes (European Medicines Agency, 2009). It is also recommended that blood pressure is measured and followed up throughout the treatment, and that the child stops using medication once a year to see if it is still necessary (ibid.). Treatment of ADHD with medication has been shown to treat the core symptoms of the condition as listed in the diagnosis, but has been less effective in improving function (Brown et al., 2005). In my email to the NK-ADHD I suggested that routinely stopping the medication could be interpreted as preventive measures with a focus on long-term effects on the cardiovascular system. Methylphenidate can be described as sympathomimetic drug, as is the more well known methamphetamine. A sympathomimetic drug means that the drug mimics the effect of the neurotransmitters of the sympathetic nervous system, like epinephrine (adrenaline) and dopamine. These compounds have a potent stimulant effect on the cardiovascular and central nervous systems (Nissen, 2006).

A month after sending the email, I received an answer from the head physician with a copy to the leader of the centre and two other colleagues. Her answers regarding my questions on medication of ADHD were divided into three points. In the first point, she agreed that "some" had raised concern about the side effects of central nervous stimulants. She continued to say that most side effects are either mild, transient or can be easily handled by dose adjustment or change of medication. In addition, she informed me about a new study in the field of sudden death, sudden cardiac arrest or stroke, related to ADHD medications. No significantly increased risk appeared in the group of children that were under current treatment with ADHD mediations. She also referred to an article titled "European guidelines on managing adverse side effects of medication for ADHD", published in European Child and Adolescent Psychiatry (Graham et al., 2011).

In the second point she commented on my interpretation of the yearly medication break as being preventive regarding overmedication and severe long-term effects. This was incorrect, she stated, as this was only a recommendation meant to assess the child's medical needs. She also underlined that it was the task of the Norwegian Medicines Agency to evaluate and if necessary change the routines regarding medication of ADHD.

In the third point she underlined that the curve showing use of ADHD medication was flattening out, and that fewer than expected used these medications, based on estimates of prevalence. Attached was a memo from the Directory of Health, referring a discussion about the use of ADHD medications in Norway during Prime Minister's Questions, PMQ [Stortingets spørretime]

(Helsedirektoratet, 2010). This memo connected the increased use of medications in Norway with the goal in the National Health Plan (Opptrappingsplanen for psykisk helsevern) that children and adolescents should have better accessible assessment and treatment regarding mental illness. It referred to the lack of knowledge of aetiology, and the existing conflict about ADHD as a diagnosis and the use of medications. The memo ended with a recommendation to focus on the persons that benefit from medication.

Based on this correspondence, the official stance of Norwegian clinical-political authorities can be interpreted as perceiving ADHD as a widespread problem pertaining to pathology as located within the individual. There also seems to be a strong belief that central nervous stimulants are efficient, not harmful, and considered a right for children fitting the ADHD diagnosis. By using the term ADHD and not HKD, NK-ADHD mediates the official Norwegian stance as having a wide pathological definition regarding restlessness in children.

Two Traditions

Through which mechanisms has the ADHD diagnosis become the most prevalent childhood mental health diagnosis? Paul Neufeld and Michael Foy (2006) have used historical ontology, in the form of a historicized conceptual analysis, to explain the growth of ADHD as a mental health diagnosis for children in North America. A definition or explanation of historical ontology is that everything that *is* in our society has emerged in history, and that this process can be studied. Hacking's reflexions on the reality of transient mental illnesses constitute the philosophical backdrop: "(…) transient mental illnesses lurch into our consciousness and fade away, creating new ways to express uncontrollable distress, ways to absent ourselves from intolerable responsibility, and legitimating exercises in both constraint and liberation" (Hacking 1998 in Hacking 2002, page 4).

Ian Hacking (2002) derived his concept of historical ontology from Michel Foucault's idea for a study of "the historical ontology of ourselves", mentioned in the essay "What is Enlightenment" (Foucault, 1984). Foucault suggests that in such a study one could be concerned with "truth through which we constitute ourselves as objects of knowledge", with "power through which we constitute ourselves as subjects acting on others", and with "ethics through which we constitute ourselves as moral agents." I suggest that this way of thinking of ourselves and others as active agents that act upon each other through certain axes of knowledge, power and ethics, serves as a contrast to a biomedical - and later biopsychosocial – model. Despite the fact that I am using them in opposition, they could equally represent parallel perspectives that provide a commentary on each other and enable mutual development. I use them to contrast one another to underline that a biomedical perspective largely promotes an epistemology where objectivity of the researcher and neutrality of knowledge is assumed. In the other tradition, the force of the subject is discussed and can be used to challenge the neutrality of the researcher, her ideas and institutions, and as a consequence, the objectivity of her knowledge.

The Historicity of ADHD

Neufeld and Foy (2006) draw on Hacking's (2002) metaphor of the ecological niche in their discussion of the life and history of ADHD in the USA. The ecological niche is the specific historical and cultural environment where ADHD as an explanation for children's troublesome behaviours can and does thrive. The elements that make up the ecological niche are referred to as vectors, describing forces acting in a certain direction. In relation to ADHD, there are four central vectors: a) Conceptions of Disability and Self, b) Observability, c) Cultural Polarity, and d) Release (Neufeld & Foy, 2006, page 452). Observability will not be the focus of this text, but runs as a premise throughout the essay; ADHD as a concept is indisputably observable in both professional and popular contexts. I will summarize the authors' analysis of recent and present conditions in North America and discuss the relevance of their perspectives for the Norwegian context.

Concepts of Disability and Self. In 1890, early American psychologist William James described a normal type of character he called the *explosive will*. Impulsivity, risk taking, and high levels of physical and verbal activity were central. In 1902, English physician George Still, described what is considered to be the first modern description of ADHD in children, referring to their deficit as "a morbid defect of moral control." In North America, the encephalitis epidemic of 1917-1918 led to an increased focus on the connection between central neurological damage and a rise in "a severe behaviour disorder with over-activity and impulsivity." This was later described as *brain injured child syndrome* by Strauss and Lethinen in 1947. This concept would later develop into *minimal brain damage* and *minimal brain dysfunction* (MBD). ADHD was first included in the DSM-IV in 1980, and was by 1994 the most commonly diagnosed childhood mental disorder in the USA.

Still's notion of defective moral control, together with the encephalitis epidemics, marked the introduction of two central premises in ADHD: rule-related behaviour and neurological dysfunction. When making the diagnosis, however, one has only observations of behaviour to rely on. In spite of widespread research, no laboratory test can reliably predict ADHD (Rowland, Lesesne, & Abramowitz, 2002). This means that in the clinical process, there is no objective evidence that the child in question has a neurological dysfunction, but this lack of evidence is not a hinder for being medicated for neurological dysfunction.

By locating the source of pathology within the child, the emergent field of ADHD has been in keeping with the perspectives of

disability that have been historically dominant within the fields of medicine, psychology and education. Through this similarity, ADHD could easily be assimilated into a larger public understanding of disability that was already in place (Neufeld & Foy, 2006). Although HKD should be the preferred diagnosis in European clinical settings, ADHD is clearly the most influential diagnostic concept also here.

Why is this? An explanation might be the central role of teacher reports in the diagnostic process. In the Norwegian context, the educational-psychological service is often involved in early assessment, and an ADHD diagnosis can give the school access to resources that would otherwise not be available. In this sense, a widespread use of the diagnosis can be argued to be beneficial for the child, his/her family and the school. One serious disadvantage of such use is that pathology is one-sidedly described as residing within the child. Additional functions of such placement of pathology will be described below.

Cultural Polarity. How is the ADHD diagnosis located within our culture? Neufeld and Foy suggest that ADHD is situated between two cultural polarities: one romantic-virtuous and the other frightening-vicious. Similarly to other mental illness diagnoses, being labelled as “ADHD”, or at least displaying behaviour compatible with the diagnosis, can afford the individual benefits in society, as long as the timing and context is right. This can be illustrated in the performances of comedians, actors, reality show participants and other celebrities being praised or rewarded for their impulsive, excessively talkative, over-the-top behaviour. The other end of the spectrum relates to research that ties the ADHD diagnosis to a conduct disorder (Rowland et al., 2002), and to emotional and motivational problems (Høvik & Plessen, 2010).

Referring indirectly to the frightening-vicious pole can be a method for promoting ADHD and medications. In the PMQ-attachment from the NK-ADHD, such an indirect referral was made as a part of a concluding consensus with recommendations for future focus (my translation from Norwegian to English):

> The question here is what should be the consensus? There are strong opposing poles here – for and against ADHD as a diagnosis, and for and against the use of medication. In this case it should be most important to think about the patients that actually have an improved life as a result of treatment. The EU note in their comments in Article 31 of Directive 2001/83/EC that the treatment of children with ADHD with medications in addition to other treatment, can reduce the symptoms of hyperactivity so that they are given an improved quality of life, and hinder social problems, unemployment, criminality and substance abuse (Helsedirektoratet 2010, page 3)

Reading this concluding remark, it seems difficult to image a responsible stance against the use of medications for children with ADHD. Questions arise, however, about the validity and relevance of such a perspective. To focus on those who benefit from being diagnosed and treated with medication, in contrast to seeing the whole picture including those who benefit from not being diagnosed and treated with medication, can be seen either as naiveté, or as a way of intentionally neglecting parts of the truth. Would such a recommendation be likely in the case of a patient group that was not indirectly linked with frightening consequences for society? Would it be possible to use these arguments to promote similar interventions for patient groups that, unlike children, have formal power and resources?

Release. This vector depends on whether the diagnosis offers some form of release for the patient and his or her surroundings. The first type of release given by the ADHD diagnosis is that it offers the person in question an explanation about the patterns in life that cause pain or are deemed as deviating from normality. A second form of release involves discharging parents, teachers and other persons involved from responsibility for causing or facilitating troublesome behaviour. Indirectly, and in practice, the responsibility is thus transferred to the child and positions the adults and the system as “helpers.” This relates to the third form of release, which is the possibility of medical or behavioural interventions that suppress bothersome behaviour to the benefit of others in the child’s everyday life (Neufeld & Foy, 2006). The importance of this release may be indirectly found in the recommendation for medication to be started at the age of six (European Medicines Agency, 2009), corresponding to the year in which children normally start school. An expansion of this perspective, based on the note from PMQ passed on by the NK-ADHD, is the release from a potential future threat to society; the expectation that children with behaviour corresponding to symptoms of ADHD have an increased possibility of ending up as criminals, unemployed or substance abusers (Helsedirektoratet, 2010). If it is true that ADHD is involved in causing crime, unemployment and substance abuse, early treatment is an important economical incentive for politicians and health authorities. Medical treatment could be seen as resource saving, in that it is cheap and less time consuming compared with other interventions or changes that might require time, effort and collaboration.

Levels of Analysis

Arguments presented by Foucault, Hacking, Neufeld and Foy, could be used to interpret the biopsychosocial model as a continuation of the positions of the patient and the physician/expert/clinician. The biopsychosocial model represents an introduction of additional levels of analysis, but not a paradigmatic change. The expansion of the biomedical model to a biopsychosocial model can be seen as a widening of the ecological niche in which diagnosis may thrive. By including psychological and social aspects of a person’s life in the diagnostic process, these aspects are also included in the concept of pathology. If the biomedical model limited the physician/expert/clinician to define a head injury as a physical lesion that needed treatment, the biopsychosocial model introduces emotional reactions and social habits as an indication of brain disease, as in ADHD. It also suggests that a particular

way of feeling, coping and expressing oneself is an illness that must be understood and treated by the physician/expert/clinician. In some cases this change of model is important and has resulted in more help being provided from within the system than previously. On the other hand it has strengthened the physician/expert/clinician's position as an active agent in defining, controlling and judging the truth about health.

The strengthening of the position of the biopsychosocial expert also allows selected parts of the truth to be shown and believed by society at large. In the case of ADHD the truth that is communicated is a biomedical one: "ADHD children" deviate from others in brain structure and physiological functioning; and a biopsychosocial one: "ADHD children" have an unhealthy way of being with others. Both these conditions are focused on the pathology of the individual. This pathology is seen as unwanted by the clinical-political authorities and possible to treat with medication or interventions aimed at the psychological or social aspects of the child.

The tradition represented by Foucault, Hacking and Neufeld and Foy is concerned with the subject, the historical coming into existence of ideas and institutions, and with how we constitute ourselves through axes of power, truth and ethics. In the case of ADHD it could be formulated like this: ADHD has come into existence as an extension of an already existing concept of disability and self. This might mean that rather than discovering pathology, the adult subjects have been active in shaping and creating the ideals regarding child personality and behaviour. We have made the rules that underlie the measurements of rule related behaviour. We are the ones who formulate, publish and understand the scientific articles that describe brain structure as abnormal, or normal but delayed. A child's developing brain, even a child that can fit the ADHD description, can also be described as miraculous, mysterious and uniquely perfect. Through our empowered position as adults we have been active in shaping the truth about children, maybe too often looking at them as imperfect grown ups. By focusing on parts of observed reality, in this case by largely operationalizing pathology as behaviour unwanted by teachers and parents in a classroom setting, the truth about restlessness and children in the clinical-political setting has largely become that of ADHD. We as adults, clinicians and experts (subjects with power) act as moral agents on a quest to "help" and "repair" children that the clinical-political authorities regard as unhealthy or problematic.

Through writing this text I have discovered that I am not criticising the biomedical or biopsychosocial model as such. When applied correctly and within its limits, it provides an excellent platform from which natural phenomena can be described and understood. Through advances in technology we can now observe and measure natural forces inside the human being. This creates new dilemmas regarding the division of nature as object and humans as subjects. We can measure neural activity and dopamine levels, but are we closer to understanding why children are restless? It is relevant and interesting that the development of some brain structures seem to follow a different trail in several children that fit the ADHD description. But what does it tell us? By using the biomedical/biopsychosocial model as a framework, we are in the danger of isolating aspects of the child, and reducing the truth to what is the shared understanding of certain authorities. This reduction enables us as adults and as a society to reduce our confusion, our shame and our responsibility. In my opinion describing these invisible forces should be a central part of the research that is conducted within the health field in general, and in the field of ADHD in particular. Donald Winnicott (1964) stated half a century ago: " I once risked the remark, 'There is no such thing as a baby'– meaning that if you set out to describe a baby, you will find you are describing a baby and someone. A baby cannot exist alone, but is essentially part of a relationship" (p. 88). If this is true, measuring "the baby" and presenting it as something true that pertains to the baby as an individual might not be the way to go about it. Yet, in the case of the restless child, this practice is mainstream. If I could wish for a different starting point when it comes to understanding and handling children's restlessness, it would be this: there is no such thing as a child with ADHD.

Implications for Research and Practice

In this essay, I have tried to outline two approaches to understanding and handling children's restlessness. As mentioned in the beginning of the essay, my aim has not been to judge one as better than the other. If anything, I have tried to show how the two approaches can provide us with different knowledge about the same phenomenon. How to best understand and handle children's restlessness has been, and still is, the object of heated discussion. I think a central problem is that a biomedical finding is taken as evidence against restlessness being a cultural and historical phenomenon, and that critical approaches to ADHD is seen as an effort to undermine biomedical research. If we could regard findings provided by the two traditions outlined in this text as findings on different levels of analysis and use them to comment and compliment each other, I think research on children's restlessness would be richer and perhaps more truthful than it is today.

Current mainstream research on this topic can best be described as research on ADHD. This research has provided us with a lot of knowledge on behaviour as observed and judged by adults close to the child. Research on medications, brain structure and activity, risk regarding criminal behaviour and drug abuse all depart from and relate to these subjective measurements. Still, the research literature on ADHD is written and read as objective measurements of the child. This discrepancy between a research goal (a true understanding of children's restlessness) and research method (invested adults' subjective observations and judgements about the child's ambiguous and emotionally laden behaviour) and the lack of reflections about this discrepancy is what led me to write this text. Future research should explore this discrepancy and relate to it throughout the research process, from study design to description of findings.

Music therapists and others working with a child that is described as having an emotional or behavioural disorder should investigate

whether there is a discrepancy between goal and method. Is the goal to bring children closer to who or where they want to be? Is the goal to help or force the child to fit in? These two goals imply two different approaches and two different ways of being with the child. The ethics of treating the child if the problem can be described as a relational, family based, or rooted in the institution and/or political system surrounding the child, should be taken into consideration.

The fact that different levels of analysis can provide us with different knowledge has enormous implications. If clinicians, researchers, political authorities, parents and kindergarten personnel all apply the same perspective on children's restlessness, the truth that is constructed is in danger of becoming one-dimensional. Knowledge provided by other levels of analysis, in this text exemplified as a tradition pertaining to historical ontology, can be perceived as threatening and might be left unrecognised, marginalised or suppressed.

References

American Psychatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). Arlington, VA: American Psychiatric Publishing.

Barne- likestillings- og inkluderingsdepartementet. (2010). *Behandling av Norges fjerde rapport til FN om oppfølging av barnekonvensjonen - Avsluttende merknader fra FNs komité for barnets rettigheter januar 2010*.

Brown, R. T., Amler, R. W., Freeman, W. S., Perrin, J. M., Stein, M. T., Feldman, H. M., . . . subcommittee on attention-deficit hyperactivity disorder. (2005). Treatment of attention-deficit/hyperactivity disorder: overview of the evidence. *Pediatrics, 115*(6), e749-757. doi: 10.1542/peds.2004-2560

Engel, G. L. (1977). The need for a new medical model: a challenge for biomedicine. *Science, 196*(4286), 129-136.

European Medicines Agency. (2009). *Questions and answers on the review of medicines containing methylphenidate*. (EMEA/658285/2008).

Foucault, M. (1984). *What is Enlightenment?* New York: Pantheon Books.

Graham, J., Banaschewski, T., Buitelaar, J., Coghill, D., Danckaerts, M., Dittmann, R. W., . . . Taylor, E. (2011). European guidelines on managing adverse effects of medication for ADHD. *European Child & Adolescent Psychiatry, 20*(1), 17-37.

Hacking, I. (2002). *Historical onthology*. London: Harper University Press.

Helsedirektoratet (2010). 201000728-1 *Spørsmål 666 "Bruk av medikamenter for behandling av AD/HD"*. Sosial- og helsedirektoratet.

Høvik, M., & Plessen, K. (2010). Emotional regulation and motivation in children with ADHD. *Tidssrift for den Norske Lægeforening, 130*(23), 2349-2352.

Helse og omsorgsdepartementet (2010). *Forskrift om godkjenning av sykehus m.m., nr 1706 av 17. desember 2010, § 4-6*.

Neufeld, P., & Foy, M. (2006). Historical reflections on the ascendancy of ADHD in North America, c. 1980 - c. 2005. *British Journal of Educational Studies, 54*(4), 449-470.

Nissen, S. E. (2006). ADHD Drugs and Cardiovascular Risk. *New England Journal of Medicine, 354*, 1445-1448.

Personal communication with NK-ADHD (National Centre for ADHD, Tourette's syndrome and Narcolepsy) (2011).

Reason, P., & Bradbury, H. (2006). *Handbook of action research*. SAGE Publications.

Rowland, A. S., Lesesne, C. A., & Abramowitz, A. J. (2002). The epidemiology of attention-deficit/hyperactivity disorder (ADHD): a public health view. *Mental Retardation and Developmental Disabilities Research Reviews, 8*, 162-170.

Sosial- og helsedirektoratet. (2005). *Veileder i diagnostikk og behandling av AD/HD*. Oslo: Sosial- og helsedirektoratet.

Statens legemiddelverk. (2009). *Bedre oppfølging av ADHD-pasienter*. Retrieved from http://www.legemiddelverket.no/templates/InterPage____80579.aspx

Ullebø, A. K. (2010). *Epidemiology of ADHD. Screening, prevalence and phenomenology of the Attention deficit/Hyperactivity Disorder phenotype.* Doctoral thesis, University of Bergen, Bergen.

Winnicott, D. W. (1964). *The child, the family and the outside world.* Harmondsworth: Penguin.

World Health Organization. (1992). *The ICD-10 Classification of mental and behavioural disorders, clinical description and diagnostic guidelines.* Oslo: Gyldendal Norsk Forlag AS.

II

International Journal of
Qualitative Studies
on Health and Well-being

co-action PUBLISHING

EMPIRICAL STUDY

Do we understand children's restlessness? Constructing ecologically valid understandings through reflexive cooperation

ANNA HELLE-VALLE, Cand. Psychol.[1], PER-EINAR BINDER, Dr. Psychol.[2] & BRYNJULF STIGE, PhD[1]

[1]*GAMUT—Grieg Academy Music Therapy Research Centre, The Grieg Academy—Department of Music, University of Bergen, Bergen, Norway and* [2]*Department of Clinical Psychology, Faculty of Psychology, University of Bergen, Bergen, Norway*

Abstract

Attention-deficit/hyperactivity disorder (ADHD) is the most widely used children's mental health diagnosis today, but the validity of the diagnosis is controversial, for instance, because it might conceal relational and ecological dimensions of restlessness. We invited parents and professionals from one local community in western Norway to participate in cooperative group discussions on how to conceptualize and understand children's restlessness. We carried out a thematic and reflexive analysis of the cooperative group discussions on ADHD and children's restlessness, and present findings related to three ecological levels inspired by Bronfenbrenner's ecological systems model. At the level of the individual, restlessness was discussed as individual trait, as the expectation to be seen and heard, and as a result of traumatization. At the level of dyad, group or family, restlessness was discussed as a relational phenomenon and as parents' problems. At the level of community, restlessness was discussed as lack of cooperation and lack of structures or resources. Our findings show how contextualized and cooperative reflexivity can contribute to more valid understandings of children's restlessness, and how cooperative inquiry can stimulate reflections about solidarity and sustainability in relation to adult's actions.

Key words: *Attention-deficit hyperactivity disorder, cooperative reflexive inquiry, ecological perspectives*

Responsible Editor: Soly Erlandsson, University West, Sweden.

(*Accepted: 16 November 2015; Published: 21 December 2015*)

How do we understand children's restlessness? To what degree is it relevant and ethically defendable to focus on problematic aspects of the individual child's behavior in a de-contextualized manner? What are the consequences of seeing restlessness as an ecologically complex phenomenon? These questions are difficult to answer and might yield a new set of discussions rather than one satisfying answer. A place to start looking for answers, however, is to investigate and challenge current mainstream research and practice in reflexive cooperation with parents and professionals. Attention-deficit/hyperactivity disorder (ADHD) is a much-used concept in both lay and professional language, and can be observed in children's descriptions of themselves, in family life, schools, and mental health institutions, in political and legal documents, and as a structuring concept for research. To shed light on the ecological complexity of children's restlessness, we invited parents and a varied group of professionals from one local community in western Norway to participate in multidisciplinary cooperative group discussions on the topic of children's restlessness.

The ubiquity of the ADHD diagnosis does not automatically prove its ecological and ethical validity, or contribute to sustainable practice. Research on ADHD suggests that it is a reliable concept, but the validity of the diagnosis is still under debate. To contextualize our concerns and research interests, we will now present and discuss a broad, but distilled selection of research on ADHD. This broad overview will be followed by brief reflection on the

Correspondence: A. Helle-Valle, GAMUT—Grieg Academy Music Therapy Research Centre, The Grieg Academy—Department of Music, University of Bergen, Lars Hilles Gate 19, NO-5000 Bergen, Norway. E-mail: anna.helle-valle@uib.no

© 2015 A. Helle-Valle et al. This is an Open Access article distributed under the terms of the Creative Commons Attribution 4.0 International License (http://creativecommons.org/licenses/by/4.0/), allowing third parties to copy and redistribute the material in any medium or format and to remix, transform, and build upon the material for any purpose, even commercially, provided the original work is properly cited and states its license.

Citation: Int J Qualitative Stud Health Well-being 2015, **10**: 29292 - http://dx.doi.org/10.3402/qhw.v10.29292

ecology of human development, before we present findings from a reflexive cooperative group discussion about how to describe and understand children's restlessness in a given context of time and place.

ADHD as neurobiological disorder

ADHD is described as a neurodevelopmental disorder with a persistent pattern of inattention and/or hyperactivity–impulsivity that interferes with functioning or development (American Psychatric Association, 2013). Inattention, hyperactivity, and impulsivity are exemplified with behaviors like wandering off task, lacking persistence, excessive motor activity when it is not appropriate, talkativeness, or as hasty actions that occur in the moment without forethought and might be harmful to the individual. Manifestations must be present in more than one setting, but signs of the disorder are said to be minimal when the child is receiving frequent rewards, is engaged in especially interesting activities, or is interacting one-on-one.

ADHD is currently the most prevalent psychiatric diagnosis in the child population (Rowland, Lesesne, & Abramowitz, 2002; Ullebø, 2010), with a worldwide pooled prevalence of 5.29% (Polanczyk, De Lima, Horta, Biederman, & Rohde, 2007). Neurological testing has revealed differences between children with and without ADHD in two domains: executive function and motivation. However, neither of these are specific to ADHD (Tripp & Wickens, 2009). ADHD is associated with altered reinforcement sensitivity, but there is a lack of studies that focus on explaining underlying cognitive and neural mechanisms (Luman, Tripp, & Scheres, 2010). Also interesting is that 90% of adults diagnosed with ADHD lack a history of childhood ADHD, nor do they show tested neuropsychological deficits in childhood or adulthood (Moffitt et al., 2015).

Stimulant treatment of ADHD

In Norway, treatment numbers doubled between 2004 and 2008 from around 12,000 to almost 23,000 individuals (Lillemoen, Kjosavik, Hunskår, & Ruths, 2012). More boys than girls were medicated, and more Norwegian children were prescribed medications than in Finland, Denmark, and Sweden, and fewer than in Iceland. In the UK, the prescription of stimulants to children, adolescents, and adults increased to 7000 prescriptions between 1994 and 2004, from around 6000 to over 450,000 prescriptions (Timimi & Leo, 2009). In 1996, over 11 million prescriptions of Ritalin were written in the United States, with over 6% of all boys taking prescribed stimulants (Timimi & Leo, 2009).

Interviews with children, parents, and professionals show that children's descriptions and experiences of being medicated tend to be more heterogeneous and critical than parents. Children also describe changes in sense of self, adverse effects, and desire to discontinue use of medication (Charach, Yeung, Volpe, Goodale, & Dos Reis, 2014; Olsvold, 2012). Some children report that stimulants improve their capacity for moral agency and increase their ability to meet normative expectations (Singh, 2013).

ADHD as the mother's project

Fathers tend to be more skeptical than mothers in the face of a possible ADHD diagnosis and medication, but are in general largely absent from research and clinical settings in this field (Singh, 2003). The process of giving a child, often a boy, an ADHD diagnosis and medication is often seen as the mother's project (Olsvold, 2012). The medicalization of children's restlessness can be related to a need to understand and be released from responsibility and guilt (Helle-Valle, 2014; Neufeld & Foy, 2006), but medicalization of children's problem behavior seems to reconstitute oppressive cultural mothering ideals rather than pierce them (Singh, 2004). The physiologically focused explanations for (often boy's) difficult behaviors seem to transfer the blame from mother to brain and facilitate what Singh calls a "no-fault" model of behavior, as organic causes are not morally accountable. Ritalin plays a central part in this absolution of blame, and both mothers and fathers describe how medicating their son with Ritalin reduces the mother's anxiety and contributes to a more pleasant family life. Singh suggests that the medical-scientific enterprise surrounding the ADHD diagnosis is partly dependent on mother's low feelings of self-worth.

Medication might contribute to a more pleasant family life, but for children that are seen as displaying difficult or oppositional behavior, type or intensity of early treatment does not predict functioning 6–8 years later. This being said, children with behavioral and socio-demographic advantage have the best long-term prognosis (Molina et al., 2009). Lower socio-economic status is associated with an overall increased risk of receiving a mental health diagnosis (Bøe, Øverland, Lundervold, & Hysing, 2012), and a correlation between socio-economic status and ADHD seems to be mediated by parent attachment and family conflict (Bøe, 2013; Russell, Ford, Rosenberg, & Kelly, 2014).

Citation: Int J Qualitative Stud Health Well-being 2015, 10: 29292 - http://dx.doi.org/10.3402/qhw.v10.29292

ADHD and violence

A seemingly different but related context is the prevalence of family violence and child abuse. Maltreated children typically struggle with regulating affect, attention, and social bonds, and ADHD is a common diagnose in this population (Ackerman, Newton, McPherson, Jones, & Dykman, 1998; Van der Kolk, 2005). There is also a strong link between childhood abuse and adult ADD or ADHD (Fuller-Thomson, Mehta, & Valeo, 2014). In the Nordic countries at least 3–9% of the child population experience severe physical abuse, and at least 7–12.5% witness violence in the family (Kloppen, Mæhle, Kvello, Haugland, & Breivik, 2014). Global prevalence of child maltreatment is estimated to be 12.7% for sexual abuse, 22.6% for physical abuse, 36.3% for emotional abuse, 16.3% for physical neglect, and 18.4% for emotional neglect (Stoltenborgh, Bakermans-Kranenburg, Alink, & Van Ijzendoorn, 2015). These numbers clearly state that child maltreatment is a huge global problem and a significant threat to the health and well-being of children that currently are not integrated in the discussions about children's restlessness that focus on their behaviors. In Norway, however, the former Minister of Children, Equality and Social Inclusion recently authored a book in which she argues that violence against children best can be described as a national taboo, and that the ADHD diagnosis plays an important role in "not seeing" the most vulnerable children (Thorkildsen, 2015).

An ecological systems approach to children's restlessness

One way to understand ADHD is to summarize it as an individual's problem that is connected to, as well as manifests itself on a biological, psychological, and social level. The research presented in this introduction confirms that children that fit an ADHD diagnosis struggle on many levels including academic performance, motivation, and in relation to parents and peers. This could indicate that the problems stem from the children themselves. On the other hand, ADHD can also be related to adverse childhood experiences, parental attachment, and socio-economic status. These findings highlight the importance of context, for instance, familial or societal conditions for children's attachment and play (Navarez, Panksepp, Schore, & Gleason, 2013; Panksepp, 1998).

That child development is a function of the ecological systems that they are a part of, and is a central premise in Bronfenbrenner's (1977, 1979) ecological system's model. The ecological environment is understood as a set of nested structures. The innermost level (micro level) is the immediate setting of the developing child, like the home or kindergarten. The child's development is affected not only by experiences in these immediate settings, but also by the relations between these settings (meso level) and by events occurring in settings where the child is not even present, like overarching patterns of ideology and organizations of social institutions (macro level). Bronfenbrenner's conceptualizations have later been elaborated and reformulated, for instance, in community psychology, where Dalton, Elias, and Wandersman (2007) have suggested a revision of the model, with the person in the center, surrounded by ecological layers of microsystems, organizations, localities, and macrosystems.

To study restlessness not only as a function of children's immediate settings but also in relation to overarching ideologies and structures, we have chosen to use an ecological systems approach in our analysis. In this article, we address the problem: How do parents and different professionals conceptualize and understand children's restlessness when they are invited to think about and beyond the diagnosis of ADHD?

Method

We invited participants to join a cooperative inquiry group, with an emphasis on ecological and interdisciplinary reflexivity (Alvesson & Sköldberg, 2000; Singh, Filipe, Bard, Bergey, & Baker, 2013). Cooperative inquiry is a form of action research aimed at strengthening the ecological validity of knowledge, and where research can be looked upon as a form of "lived inquiry" (Heron & Reason, 2001). The research process entails moving between reflection and action in a systematic and increasingly refined way (Hummelvoll, 2006). The cooperative inquiry group was part of a research project on community music therapy in kindergarten. The community music therapy project was carried out in parallel with the cooperative inquiry group discussions and ended with a performance that the participants in the cooperative inquiry group was invited to attend. The thirteen 5-year-old children that attended the community music therapy project attended the kindergarten that also hosted the cooperative inquiry group. The music therapy project will not be further presented or discussed in this article, since music therapy is not specifically addressed in this study.

Participants and procedure

Participants were formally invited through an information sheet titled, *Music therapy in kindergarten: a different way to meet restlessness?* The research project was presented as an invitation to discuss and expand on current perspectives and practice, and music

therapy was introduced as an alternative and resource-oriented approach to restlessness. We contacted local institutions that were involved in assessing and making decisions about children's restlessness and included those willing to participate. For ethical and practical reasons, the kindergarten distributed the information sheet to the parents, and parents were recruited through the kindergarten. As a part of this recruitment procedure, the first author and principal investigator (Helle-Valle) was invited to present the project during a meeting with the parent representatives. The three fathers that were elected as parent representatives in the kindergarten were interested in the project right away and wanted to participate without trying to recruit some of the other parents. Given the general absence of fathers in ADHD research, and because of the high number of female professionals in the group, we were happy to include the three fathers without further recruitment procedures.

The cooperative inquiry group ended up consisting of three men and seven women: the three fathers, two pedagogical leaders and the director of the kindergarten, a music therapist and a psychologist from the pedagogical–psychological services, a caseworker from Child Welfare, a clinical social worker from Child and Adolescent Psychiatry Unit, and a General Practitioner (GP). A music therapist from the pedagogical–psychological services from a different part of town and a researcher with a background in psychology facilitated the group discussions (Helle-Valle).

Outline of the group meetings

The cooperative inquiry group met four times, with some weeks in between each meeting, so that the first meeting took place in February and the fourth and final group meeting took place 7 months after the first. The discussions were improvised around the topic of children's restlessness based on the agenda of the participants and took the form of an informal and focused discussion. If some participants did not take part in the discussions, the facilitators would try to include them by relating the discussion to their context. The facilitators also shared their point of view and their experience, as this was a collaborative discussion and not a focus group interview. The first meeting was used to introduce the participants to each other and to share information about one's own context and initiate reflections on children's restlessness. The group members were interested in findings and critical perspectives related to ADHD, and the facilitators presented similar perspectives as those given in this introduction. The second meeting consisted of reflections on adults' actions, the third meeting was used to watch recordings of the community music therapy project and discuss these, and the fourth meeting was used to continue discussions from the two first meetings, as well as spend some time evaluating the research process. All group meetings were hosted by the kindergarten and lasted 2 h, apart from the fourth meeting that was extended by 1 h.

Ethical considerations

Ethical approval was obtained from the regional committee for medical and health research ethics (protocol: 2013/1281/REK vest). Informed consent procedures rested on written information sheets that were signed by all participants, and verbal information to the kindergarten, the pedagogical–psychological services, and the children's welfare. A verbal agreement in the first group meeting underlined the importance that individual children were not discussed in the group, and that participants were to draw on their own experience or anonymized examples in discussing children and restlessness.

We were able to recruit three fathers to the cooperative inquiry group, but all of the professional participants were women. Despite profound changes related to gender equality and employment in the Nordic societies over the last 50 years, there is still more women than men who work with children. In our cooperative inquiry group, the three parent representatives were men, and this gave us an interesting point of departure for the discussions as fathers' voices tend to be underrepresented in research on ADHD. During the discussions in the cooperative inquiry group, fathers tended to ask more questions and the professional participants tended to provide answers. This being said, the fathers were very engaged in the process, expressed their concern that ADHD had become such an influential perspective, and wanted to know more about the forces behind this development. One of the fathers, for reasons unknown to the authors of this article, only attended the first meeting. We do not know why this happened, and the reasons might be practical or personal without any connection to the topic discussed. However, it could also be understood in light of Singh's (2004) and Olsvold's (2012) research on ADHD as the mother's project, where fathers' absence could be interpreted as an avoidant expression of disagreement.

Critical and reflexive research is needed to prompt and inform critical reflection in everyday practice. However, critical research on pathology and power issues in relation to children will most likely touch upon sensitive issues. We have done our best to facilitate the cooperative inquiry group in an informative and truly cooperative manner, to carry out the analysis with the group in mind and through their

Citation: Int J Qualitative Stud Health Well-being 2015, **10**: 29292 - http://dx.doi.org/10.3402/qhw.v10.29292

direct cooperation, and to present and discuss the findings in a reflexive way without compromising the integrity of the participants or of the children they described.

Data collection

All group meetings were audio-recorded, transcribed verbatim, and anonymized. Care was taken to remove all information that could directly or indirectly identify actual people, children, or places when using extracts from the transcriptions.

Analysis

We used two complementary and interrelated approaches when analyzing the data: thematic analysis and a reflexive approach. The thematic analysis of the transcribed text was carried out by the first author in a stage-wise process (Binder, Holgersen, & Moltu, 2012; Braun & Clarke, 2012) that is described in further detail below. Before, during, and after the thematic analysis, both the authors and the members of the cooperative inquiry group were involved in an analytical process that can be described as explorative and reflexive (Alvesson & Sköldberg, 2000; Binder et al., 2012). Within this interdisciplinary and open reflexive approach, we analyzed the data on the premise that children's development is an ecologically situated phenomenon (Bronfenbrenner, 1979).

In summary, our analytic process was carried out in several stages: (1) the first author who also facilitated the group discussions noted her reflections after each group discussions and discussed these with her co-facilitator and the co-authors of this article. This created opportunities for reflexive dialogue about the processes in the co-operative inquiry group and also served to update the researchers that had not been part of the group discussions. (2) After each meeting, the first author and facilitator made a summary of the group discussions and emailed these to the participants in the co-operative inquiry group. This was done to help the participants remember what we had discussed or to inform those who had missed the meeting, support dissemination by the participants in their respective practice fields, strengthen the group's identity, and to indirectly remind the participants about our availability for input and comments between meetings. (3) After the last meeting in the cooperative inquiry group, the first author analyzed the transcribed audio recordings for themes that were regarded as relevant to the research question. These were how to understand children's restlessness, how to handle restlessness in practice, power issues related to structure and responsibility, reflections on practice improvement and *status quo* in relation to prevention, health promotion, cooperation, and resources. The original transcribed material counted close to 90,000 words. For the purpose of this article, the authors decided to focus on the participants' *understandings* of children's restlessness. (4) Themes and codes related to the overarching category *Restlessness understandings* were re-analyzed from an ecological systems perspective. Ecological levels were discussed and adjusted in relation to the themes and codes, and we ended up with three levels slightly different from the micro, meso, exo, and macro levels described by Bronfenbrenner (1979). Our levels more closely correspond to that of Dalton et al. (2007) described above. We defined the first ecological level of analysis as the individual child, the second as dyad, group, or family, and the third as community. Discussions would often include several ecological levels, so we chose to place findings according to the focus that was emphasized. (5) A first draft of the article was sent to all the co-authors and members of the cooperative inquiry group for comments. (6) The first author completed the article informed by these comments.

Results

Level of the individual contains the themes *Restlessness as individual trait*, *Restlessness as expectation to be seen and heard*, and *Restlessness as a result of traumatization*. *Level of dyad, group, or family* contains the themes *Restlessness as relational phenomenon* and *Restlessness as parents' problems*. *Level of community* contains the themes *Restlessness as lack of cooperation* and *Restlessness as lack of structures or resources*. Restlessness as children's needs to be seen and heard and in relation to traumatization has been placed under *Level of the individual*, despite the fact that these themes imply a relation. We have chosen to place these themes at the *Level of the individual* because participants reflected on the individual child's behavior and what this behavior could communicate.

Level of the individual

Restlessness as individual trait. Children's restless behavior was a focus throughout the discussions, and there were many direct or indirect descriptions of "the problem child." Cooperative, polite, and generous behavior was seen as desirable and adaptive behaviors that could give the child a sense of mastering. The group also reflected on restlessness as a trait relating to personality, including restlessness as a sign of creative talent. Restlessness was often talked about as externalized, but the psychologist from the pedagogical–psychological service was especially

interested in and concerned by children's internalized or "invisible" restlessness.

There was a general concern that ADHD exaggerated the focus on individual symptoms and function at the expense of resources, hope, and ecological complexity. Framing restlessness as ADHD could make the individual passive, promote hopelessness, induce guilt, and shift responsibility from adults and society to individual children. Being restless was talked about as being a problem, but the participant from Child and Adolescent Psychiatry Unit referred from a conversation with a patient: "I talked to a boy the other day, with his family, and then it was like we talked about 'Some children grow out of it', and then he said 'Yes, I hope I don't!'"

The GP reported that discussions in the cooperative inquiry group had made her reflect on the ecological complexity of children's restlessness. Her appraisal was that children's restlessness was often related to family or societal problems, and she described the limitations of using an individual-oriented diagnosis when she experienced the problem as a complex family and health system situation. She reported that the group discussions had led to a decline in referrals regarding ADHD, and an increase in cooperative initiatives. The music therapists and the psychologists in the group challenged the GP to ask parents about the child's resources during consultations and include these in the formal referral documents. The GP went on to suggest that referrals could contain a short description of context for observations and that the GP also could include a short reflection pertaining to the limitations of observing a child in such a setting.

Restlessness was often talked about as externalized, but the psychologist from the pedagogical–psychological service was especially interested in and concerned by children's internalized or "invisible" restlessness. Participants were both concerned about how the individual child was to be understood, but also saw the need to look beyond the individual and acknowledge contextual factors to better understand the child's restless behavior.

Restlessness as expectation to be seen and heard. The kindergarten teachers talked about restlessness as something stemming from today's children's expectations of being seen and heard. Today's children were described as more self-centered and less generous than before, and this tendency was seen as especially problematic in group settings. Being seen, heard, and respected was to a certain extent talked about as important in relation to adult needs, and as a relational challenge or effort in relation to children's needs.

At the end of the first meeting, one of the fathers suggested that the group should investigate their own contribution to restlessness in everyday settings. After this, the group shared personal experiences with being restless, for instance, stemming from boredom or a feeling of being invalidated.

Restlessness as a result of traumatization. The overlapping qualities of behavior fitting the ADHD diagnostic criteria and behavior stemming from complex traumatization were discussed throughout the meetings. ADHD was discussed as potentially being a sign of family violence, masking the violence, or giving adults excuses to handle their children roughly. ADHD was seen as indirectly facilitating adult displacement or avoidance of responsibility. The participant from Child Welfare commented on the high occurrence of ADHD in the records of children in the Child Welfare system and described an encounter with a now grown up man that had been admitted on several occasions during his childhood. He told her how every emergency hospitalization for psychosis was caused by his stepfather "beating him senseless."

One of the longest and most charged pauses occurred after a comment about our responsibility as adults and as a community to discover and help children that are exposed to family violence. One of the participants went on to formulate the question "Do we have a good enough understanding of the child?" emphasizing that we should not quit until we do. "Understanding the child" became a recurring topic throughout the four meetings.

Level of dyad, group, or family

Restlessness as a relational phenomenon. Restlessness was often described as existing between children, or between adults and children. Both the kindergarten teachers and the fathers saw restlessness as a way for children to get attention from others when feeling insecure, or as a sign that they did not respect your authority. The participant from the Child and Adolescent Psychiatry Unit talked about the importance of allowing children to express their needs while keeping one's place in the driver's seat. She went on to explain that struggling children only have two choices, withdrawal or restlessness, and that both should be understood as communication.

The kindergarten teachers described how restlessness arose in certain constellations of children, and how it became a problem when there were too many children per adult. The kindergarten director

Citation: Int J Qualitative Stud Health Well-being 2015, **10**: 29292 - http://dx.doi.org/10.3402/qhw.v10.29292

held the ideal ratio to be 4 adults per 16–18 children. An everyday problem in kindergarten was to regulate restlessness in a group of children where some needed more stimulation and others were easily overstimulated. The kindergarten teachers and the music therapists described how restlessness would form in gaps between structured activities, for instance, when children were supposed to stop one activity and start something new. All participants with experience of being pedagogical leaders in kindergarten—the music therapist facilitator, kindergarten teachers, and the kindergarten director—also discussed children's creativity as an everyday challenge and as a relational problem. The fathers were interested in children's ability to act in an open and including way, and to promote a sense of mastering.

Restlessness as parents' problems. The participant from the Child and Adolescent Psychiatry Unit shared what she called a perplexing experience of hearing a group of well-educated, well-to-do mothers all wondering if their child had ADHD. The participants with grown up children described today's parents as more insecure about making decisions. The group discussed how child rearing had changed over the last decades regarding children's participation. Parent insecurity was held to be a negative development, but also the price one had to pay for understanding children better. Modern child rearing was seen as characterized by compromise.

Several participants highlighted the connection between tired adults and reduced tolerance for restlessness. Children's restlessness was often discussed as a sign of parent's problems, and ADHD as a framework for understanding restlessness could be seen as facilitating parents' lack of awareness or willingness to deal with these problems. The other music therapists described how two of her friends struggled with their relationship, and how despite being on their best behavior, one could "cut the tension with a knife." She shared her own feeling of being uneasy as if there was a "constant underlying vibration" when spending time with them, and related her experience to children's incapacity to deal with such issues, possibly leading to experiences of shame and self-blame.

The participant from Child and Adolescent Psychiatry said that restlessness does not always need to be referred and examined, but that many parents could benefit from using less negative or critical parenting strategies and rather learn about children's need for support in regulating their feelings and relationships. Professionals should take care to place relational responsibility with the parents, even if it is experienced as challenging.

Level of community

Restlessness as lack of cooperation. The participant from the Child Welfare Unit talked about restlessness in relation to children or families that did not fit in, that were not given relevant help, or any help at all. The kindergarten personnel were satisfied with current cooperation with parents, with the Child Welfare Services, and with an interdisciplinary consultation team in their local community. The GP, however, shared an example of how current cooperation could cause restlessness and how it failed to meet the complex ecological needs of vulnerable children:

> There was a [little girl] who had experienced that her mother for the third time this summer was admitted with paranoid psychosis and was really sick. And in this case there was a grandmother around that took care of the [girl] in relation to admission. But then the mother was released from hospital, and the Child Welfare Services were in the picture. The mother had been released and wasn't paranoid any more, but she struggled with her own things. And there was a [small baby] in this, and then the mother turns up with the [little girl] in my office and says "The Child Welfare Services says that I have to refer her to the Child and Adolescent Psychiatry Unit, because she has these tantrums, she is so restless" [...]And it is clear what is missing, [it] is follow up from adult psychiatry where the mother had been admitted. She is actually going home to the responsibility of two children—the father was peripheral in this. So I refer to the Child and Adolescent Psychiatric Unit, because I thought that "one has to get involved and do something," but then the Child and Adolescent Psychiatric Unit makes a sensible assessment that the anger has to do with her life situation. Maybe it was related to the fact that it was the middle of the summer holidays, because there was a psychologist at the Adult Psychiatric Unit that was supposed to follow up the children of those admitted, but it seemed to have slipped, and there wasn't any sort of follow up. And the girl gets an appointment [six months later]! And then the mother reacts to this "It's *now* that we needed- " But I agree with that assessment, because it's not a diagnosis for the daughter, it is *help* in that life situation. There are some holes, sometimes, where children fall between several chairs.

The GP criticized how current practice too often rests on a clinician's availability, interest, and willingness to spend resources on this. Two approaches

within the mental health care system were discussed: one quick with a focus on changing the child that often involves medication from day 1 and another a slower approach with a focus on changing the child's everyday situation by cooperating with adults in the child's immediate context.

Restlessness as lack of structures or resources. The restlessness was experienced as particularly challenging when arising in places or ways that challenged the adults' competence, preferences, architecture, or number of staff. Examples of this were rough and tumble play inside, children with opposite needs sitting next to each other during a meal, or children with suspected complex trauma that the kindergarten worried about, but felt incompetent in helping.

The group discussed processes of negotiating the structural possibilities and limitations in the community. The fathers and kindergarten teachers described how sports were an important social arena, and how practice or summer camp sometimes functioned as a relief for tired parents in spite of their child's interest or talent.

Restlessness was related to the architecture in two different ways. The first was construction of the kindergarten buildings and whether the architecture supported or hindered children's development. The second perspective on architecture was how children often can hear parents arguing through the walls, and how parents sometimes think that as long as they argue after the child has gone to bed, it does not affect the child.

The group discussed how children's creative talents, or creatively gifted children, are met by the different systems and generally understood. Several members expressed concern that children's creativity tends to be systematically misunderstood and overlooked, and rarely used as a resource for change. The music therapists discussed how music could facilitate a playful approach to restlessness, and that music therapists could support kindergarten personnel in this process.

Discussion

Therefore, how do parents and different professionals conceptualize and understand children's restlessness when they are invited to think about and beyond the diagnosis of ADHD? Our findings show that children's restlessness can be conceptualized as a many-layered ecological phenomenon that spans from the child's problems and resources to restlessness as a relational phenomenon, to resources and structures in the local community, and to overarching perspectives on how children's restlessness can be understood in relation to individual and context. The participants reflected on children's need to be seen and heard not only as important, but also as a relational and cultural challenge. "Do we have a good enough understanding of the child?" ended up being a central question during the discussions and points to a pragmatic aspect of understanding and to the possibility that ADHD might not be a *good enough* understanding in this respect.

Based on our results, we argue that increased reflexivity can contribute to increase the validity of research and everyday understandings of children's restlessness. Furthermore, the process of this cooperative inquiry stimulated participants to reflect on the solidarity and the sustainability of current practice. The participants did not use these terms themselves, but worried about the deflection of responsibility that ADHD seemed to facilitate; a focus on problematic behavior can prevent adults from seeing their own contribution, underlying problems, and contextual factors. In interpreting the material, we choose to use the word *solidarity* to highlight this. Solidarity is one of the central values informing the Universal Declaration of Human Rights, but as Stjernø (2004) clarifies, solidarity is a multifaceted concept. Solidarity might involve attempts of realizing common interests as well as attempts of realizing a better world. During discussions, both dimensions were present, and the participants stressed concerns about being responsible human beings in context. During discussions, participants often pointed to adults' responsibility, which again led the group to reflect on restlessness as both a co-created and a shared problem. Judging by the reflections in the group, it seems that the sustainability of perspectives and practice depends on such efforts of solidarity. Based on our findings, we also argue for the need to integrate research on ADHD with research on child maltreatment and point to the possible tension between ADHD and a child perspective and children's own perspectives.

Validity, solidarity, and sustainability

Both current research on ADHD and our findings indicate that adults experience children's restless behaviors as problematic, and that restlessness can be understood as "impaired function" in an everyday setting. The participants in the cooperative inquiry group had many descriptions of "the problem child," but also sensed the need to look beyond the behavioral problems of the individual child and acknowledge resources and contextual factors. Our results show that when adults who are involved in children's everyday lives reflect on ADHD, they question biomedical explanations and point to the risks of an

Citation: Int J Qualitative Stud Health Well-being 2015, **10**: 29292 - http://dx.doi.org/10.3402/qhw.v10.29292

exaggerated focus on individual pathology. The participants rather understood restlessness as a situated and contextual phenomenon that needs to be approached from a variety of perspectives, including the children's own perspectives. This meant allowing children to express their needs and perspectives, and simultaneously to remind parents about their responsibility to "keep their place in the driver's seat" as it was coined by one of the participants.

The importance of balancing children's freedom of expression with an adult perspective on responsibility and community can be related to ethical perspectives on community and ecological sustainability that point to the need for an increased sense of *firmness* in child rearing and society at large (Foros & Vetlesen, 2012). This need for firmness was discussed indirectly when participants wondered if seeing and hearing children to the extent that is common in Norway today can make them self-centered as well as difficult to handle in groups since children might lack awareness of others and of community on both an individual and societal level. The tension between being seen and heard oneself vs. being aware of others and of community could be understood in light of tension between the Convention on the Rights of the Child (United Nations, 1989), where children's rights to be seen and heard are described, and the descriptions of how children's should not behave (e.g., the ADHD diagnosis). This macro level tension could contribute to both national and international discussions about the frames within which children are raised and understood. Tracing the tension between individual and group from macro to micro could contribute to a better understanding and contextualization of children's restlessness.

Our results show that restlessness can be understood in relation to individual children's problems or creative talent, but also as *contexts* that impair children's function and create symptoms of restlessness. It is interesting that the participants in this cooperative inquiry group resisted the biomedical perspective of ADHD and the medicalization of restlessness despite its immense influence. Instead, parents, teachers, therapists as well as the GP constantly returned to relational processes, cooperation, and the need for a deeper and contextualized understanding. Rather than highlighting the need for efficiency and reliability, two central strengths of an ADHD approach, our findings point to the need for increased validity, solidarity with children's problems as they experience them, and to focus on the sustainability of change by looking beyond the perceived restlessness, identify the need for resources, and also promote cooperation between the systems they live in.

Integration of perspectives

Reflecting on the restless child as possible victim of maltreatment, created an interesting dynamic in the group: a distinct silence was followed by reflections on whether we *really understand*. Interestingly, being released from complexity, confusion, guilt, and responsibility is held to be an important function of the ADHD diagnosis (Neufeld & Foy, 2006). If ADHD serves this function, that adults get the benefit of avoiding children's, well as their own, pain and confusion, should it still be considered a useful concept for practice and research? How could this potentially destructive aspect of diagnostic practice be amended or avoided?

One possible strategy could be to systematically integrate a *child perspective* in both practice and research (Sherr, Skar, Clucas, Von Tetzchner, & Hundeide, 2013; Sommer et al., 2010). Child perspectives direct adults' attention towards an understanding of children's perceptions, experiences, and actions in the world, and can prevent "difficult" children from being expelled from the zone of intimacy where empathic care takes place (Sommer et al., 2010). Through her research, Olsvold (2012) shows how the relational dynamic and focus for communication might change as the ADHD diagnosis "enters," and that this change undermines a child perspective and obscures the child's own perspectives.

A second strategy could be to integrate a child maltreatment perspective in both research and practice. A developmental perspective on complex traumatization (Braarud & Nordanger, 2011) is one example of such integration, and can help both researchers, practitioners and parents to understand restlessness in terms of regulation. Roughly speaking, a regulation perspective can indicate that the restless child is bored and expresses a need for stimulation or that the child is overstimulated, scared, or feels threatened and needs help to calm down and/or feel safe. An unmet need for regulation over time, like neglect or abuse, can disturb the child's development and create both internal and external restlessness.

The very popularity of the ADHD diagnosis has been explained with its potential to release adults from responsibility, confusion, and shame (Neufeld & Foy, 2006). This could explain the finding that parents and professionals need to be reminded about the relational responsibility and ecological complexity. It might also explain why research on ADHD and on child maltreatment is poorly integrated despite evidence that suggests a strong connection between the two (Fuller-Thomson et al., 2014). Currently, being traumatized and having ADHD are treated as a question of differential diagnosis, and some children are given both. In practice, however, ADHD is the most widely

used diagnosis, even though child maltreatment is estimated to be a bigger public health problem both globally (Stoltenborgh et al., 2015) and in the Nordic countries (Kloppen et al., 2014).

Child maltreatment is an important and poorly integrated aspect. However, not all restlessness stems from experiences of complex traumatization. As the participants pointed out, many parents need to use fewer critical and negative strategies when communicating with their children. Many children also overhear parents' arguments or sense relational tensions without having the means to understand or handle these. One participant's comment about the shared responsibility to remind parents of their position and responsibility might indicate that there exists a culture of avoidance in the adult population, and that ADHD serves to facilitate this.

Summary and conclusion

Our findings suggest that adults from one local community in western Norway that are involved in children's everyday life describe children's restless behaviors as an everyday challenge but seem to resist the individual and pathology focused explanations provided by a biomedical perspective. Participants resisted the medicalization of children's restlessness by sharing everyday reflections that outlined a need for more ecologically valid understandings, a new sense of solidarity in the face of children's problems, and increased sustainability of practice. Discussions regarding child maltreatment lead to a deep and genuine wish to *understand* children better. The findings from our study correspond to findings from critical research on ADHD where basic questions about the validity of the ADHD diagnosis and the sustainability of medical treatment of symptoms are heavily debated.

Our findings point to possible implications on several ecological levels. At a micro level, our findings point to the need for more awareness about the relational nature of restlessness which in turn might point to the need for resources to better handle children's restlessness and creativity in everyday settings. At a meso level, our findings point to a need for increased and improved cooperation between institutions in the local community. At a macro level, our findings indicate a need for a more reflexive approach to children's restlessness, which again could act to increase the validity of our understandings, and facilitate solidarity and sustainability in the actions we take when faced with children's restlessness. Rather than being neutral observers or helpers, adults co-create children's problems through their interactions with children and through their interpretations of children. As co-creators, adults share the responsibility to resolve children's problems. Through becoming aware of our role and responsibility as co-creators, we can facilitate interpretations of children's restlessness that better correspond to their own perspectives and contribute to sustainable solutions in their life-worlds.

Acknowledgements

The authors thank the participants in the cooperative inquiry group and Professor Norman Anderssen for their contributions to this article.

Conflict of interest and funding

This study was funded by the University of Bergen and is part of the PhD of Anna Helle-Valle.

References

Ackerman, P. T., Newton, J. E. O., McPherson, W. B., Jones, J. G., & Dykman, R. A. (1998). Prevalence of post traumatic stress disorder and other psychiatric diagnoses in three groups of abused children (sexual, physical, and both). *Child Abuse & Neglect*, *22*(8), 759–774. doi: http://dx.doi.org/10.1016/S0145-2134(98)00062-3

Alvesson, M., & Sköldberg, K. (2000). *Reflexive methodology.* London: Sage.

American Psychatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). Arlington, VA: Author.

Binder, P.-E., Holgersen, H., & Moltu, C. (2012). Staying close and reflexive: An explorative and reflexive approach to qualitative research on psychotherapy. *Nordic Psychology*, *64*(2), 103–117.

Braun, V., & Clarke, V. (2012). Using thematic analysis in psychology. *Qualitative Research in Psychology*, *3*(2), 77–101.

Bronfenbrenner, U. (1977). Toward an experimental ecology of human development. *American Psychologist*, *32*, 513–531.

Bronfenbrenner, U. (1979). *The ecology of human development: Experiments by nature and design*. Cambridge, MA: Harvard University Press.

Braarud, H. C., & Nordanger, D. Ø. (2011). Kompleks traumatisering hos barn: En utviklingspsykologisk forståelse. *Tidsskrift for Norsk Psykologforening*, *48*(10), 968–972.

Bøe, T. (2013). *Socioeconomic status and mental health in children and adolescents*. PhD thesis, University of Bergen, Bergen.

Bøe, T., Øverland, S., Lundervold, A., & Hysing, M. (2012). Socioeconomic status and children's mental health: Results from the Bergen Child Study. *Social Psychiatry and Psychiatric Epidemiology*, *47*(10), 1557–1566. doi: http://dx.doi.org/10.1007/s00127-011-0462-9

Charach, A., Yeung, E., Volpe, T., Goodale, R., & Dos Reis, S. (2014). Exploring stimulant treatment in ADHD: Narratives of young adolescents and their parents. *BMC Psychiatry*, *14*, 110.

Dalton, J. H., Elias, M. J., & Wandersman, A. (2007). *Community psychology. Linking individuals and communities* (2nd ed.). London: Thomson Learning.

Foros, P. B., & Vetlesen, A. J. (2012). *Angsten for oppdragelse: et samfunnsetisk perspektiv på dannelse* [The anxiety for upbringing: a socioethical perspective on education]. Oslo: Universitetsforlaget.

Fuller-Thomson, E., Mehta, R., & Valeo, A. (2014). Establishing a link between attention deficit disorder/attention deficit hyperactivity disorder and childhood physical abuse. *Journal of Aggression, Maltreatment & Trauma*, *23*(2), 188–198. doi: http://dx.doi.org/10.1080/10926771.2014.873510

Helle-Valle, A. (2014). How do we understand restlessness? A critique of the biopsychosocial model and ADHD as the dominating perspective in current understanding and treatment. *Voices: A World Forum for Music Therapy*, *14*(1).

Heron, J., & Reason, P. (2001). The practice of co-operative inquiry: Research 'with' rather than 'on' people. In P. Reason & H. Bradbury (Eds.), *The handbook of action research* (pp. 144–154). London: Sage.

Hummelvoll, J. K. (2006). Action oriented research cooperation—Theoretical grounds and practical implications [Handlingsorientert forskningssamarbeid—Teoretisk begrunnelse og praktiske implikasjoner]. *Norsk Tidsskrift for Sykepleieforskning*, *8*(1), 17–30.

Kloppen, K., Mæhle, M., Kvello, Ø., Haugland, S., & Breivik, K. (2014). Prevalence of intrafamilial child maltreatment in the Nordic countries: A review. *Child Abuse Review*, *24*(1), 51–66. doi: http://dx.doi.org/10.1002/car.2324

Lillemoen, P. K. S., Kjosavik, S. R., Hunskår, S., & Ruths, S. (2012). Prescriptions of drugs against AD/HD 2004–08 [Føreskriving av legemiddel mot AD/HD 2004–08]. *Tidsskrift for den Norske Legeforening*, *132*(16), 1856–1860.

Luman, M., Tripp, G., & Scheres, A. (2010). Review: Identifying the neurobiology of altered reinforcement sensitivity in ADHD: A review and research agenda. *Neuroscience and Biobehavioural Reviews*, *34*, 744–754.

Moffitt, T. E., Houts, R., Asherson, P., Belsky, D. W., Corcoran, D. L., Hammerle, M., et al. (2015). Is adult ADHD a childhood-onset neurodevelopmental disorder? Evidence from a four-decade longitudinal cohort study. *American Journal of Psychiatry*, *172*(10), 967–977. doi: http://dx.doi.org/10.1176/appi.ajp.2015.14101266

Molina, B. S. G., Hinshaw, S. P., Swanson, J. M., Arnold, L.-E., Vitiello, B., Jensen, P. S., et al. (2009). The MTA at 8 years: Prospective follow-up of children treated for combine-type ADHD in a multisite study. *Journal of the American Academy of Child and Adolescent Psychiatry*, *48*(5), 484–500.

Navarez, D., Panksepp, J., Schore, A. N., & Gleason, T. (2013). *Evolution, early experience and human development: From research to practice and policy.* New York: Oxford University Press.

Neufeld, P., & Foy, M. (2006). Historical reflections on the ascendancy of ADHD in North America, c. 1980–c. 2005. *British Journal of Educational Studies*, *54*(4), 449–470.

Olsvold, A. (2012). *Når "ADHD" kommer inn døren: En psykososial undersøkelse av barns, mødres og fedres forståelse og opplevelse av ADHD-diagnose og -medisinering* [When "ADHD" enters: A psychosocial investigation of children's, mothers' and fathers' understanding and experience of ADHD diagnosis and medication]. PhD thesis, Universitetet i Oslo, Oslo.

Panksepp, J. (1998). Attention deficit hyperactivity disorders, psychostimulants, and intolerance of childhood playfulness: A tragedy in the making? *Current Directions in Psychological Science*, *7*(3), 91–98.

Polanczyk, G., De Lima, M. S., Horta, B. L., Biederman, J., & Rohde, L. A. (2007). The Worldwide prevalence of ADHD: A systematic review and metaregression analysis. *American Journal of Psychiatry*, *164*(6), 942–948. doi: http://dx.doi.org/10.1176/ajp.2007.164.6.942

Rowland, A. S., Lesesne, C. A., & Abramowitz, A. J. (2002). The epidemiology of attention-deficit/hyperactivity disorder (ADHD): A public health view. *Mental Retardation and Developmental Disabilities Research Reviews*, *8*, 162–170.

Russell, G., Ford, T., Rosenberg, R., & Kelly, S. (2014). The association of attention deficit hyperactivity disorder with socioeconomic disadvantage: Alternative explanations and evidence. *Journal of Child Psychology and Psychiatry*, *55*(5), 436–445.

Sherr, L., Skar, A.-M. S., Clucas, C., Von Tetzchner, S., & Hundeide, K. (2013). Evaluation of the International Child Development Programme (ICDP) as a community-wide parenting programme. *European Journal of Developmental Psychology*, *11*(1), 1–17. doi: http://dx.doi.org/10.1080/17405629.2013.793597

Singh, I. (2003). Boys will be boys: Fathers' perspectives on ADHD symptoms, diagnosis, and drug treatment. *Harvard Review of Psychiatry*, *11*(6), 308–316.

Singh, I. (2004). Doing their jobs: Mothering with Ritalin in a culture of mother-blame. *Social Science & Medicine*, *59*(6), 1193–1205. doi: http://dx.doi.org/10.1016/j.socscimed.2004.01.011

Singh, I. (2013). Not robots: Children's perspectives on authenticity, moral agency and stimulant drug treatments. *Journal of Medical Ethics*, *39*, 359–366. doi: http://dx.doi.org/10.1136/medethics-2011-100224

Singh, I., Filipe, A., Bard, I., Bergey, M., & Baker, L. (2013). Globalization and cognitive enhancement: Emerging social and ethical challenges for ADHD clinicians. *Current Psychiatry Report*, *15*, 385.

Sommer, D., Samuelsson, I. P., & Hundeide, K. (2010). *Child perspectives and children's perspectives in theory and practice* (Vol. 2). Dordrecht: Springer.

Stjernø, S. (2004). *Solidarity in Europe: The history of an idea*. Cambridge, UK: Cambridge University Press.

Stoltenborgh, M., Bakermans-Kranenburg, M. J., Alink, L. R., & Van Ijzendoorn, M. H. (2015). The prevalence of child maltreatment across the globe: Review of a series of meta-analyses. *Child Abuse Review*, *24*(1), 37–50. doi: http://dx.doi.org/10.1002/car.2353

Thorkildsen, I. M. (2015). *Du ser det ikke før du tror det. Et kampskrift for barns rettigheter* [You do not see it before you believe it. A diatribe for children's rights]. Oslo, Norway: Vigmostad & Bjørke.

Timimi, S., & Leo, J. (Eds.). (2009). *Rethinking ADHD, from brain to culture*. Hampshire, UK: Palgrave Macmillan.

Tripp, G., & Wickens, J. R. (2009). Neurobiology of ADHD. *Neuropharmacology*, *57*, 579–589.

Ullebø, A. K. (2010). *Epidemiology of ADHD. Screening, prevalence and phenomenology of the attention deficit/hyperactivity disorder phenotype*. PhD thesis, University of Bergen, Bergen.

United Nations. (1989). *Convention on the rights of the child: Adopted and opened for signature, ratification and accession by General Assembly resolution 44/25 of 20 November 1989 entry into force 2 September 1990, in accordance with article 49.* Retrieved October 19, 2015, from http://www.ohchr.org/en/professionalinterest/pages/crc.aspx.

Van der Kolk, B. A. (2005). Developmental trauma disorder: Towards a rational diagnosis for chronically traumatized children. *Psychiatric Annals*, *35*, 401–408.

III

The dynamics of ADHD in children – a critical standpoint

Anna Helle-Valle[1], Per-Einar Binder[2], Norman Anderssen[3], Brynjulf Stige[1]

1: GAMUT – Grieg Academy Music Therapy Research Centre, The Grieg Academy – Department of Music, University of Bergen/ Uni Research Health

2: Department of Clinical Psychology, Faculty of Psychology, University of Bergen

3: Department of Psychosocial Science, Faculty of Psychology, University of Bergen, and Research Unit for General Practice, Uni Research Health

Correspondig Author:

Anna Helle-Valle, Lars Hilles gate 19, 5000 Bergen, NORWAY

anna.helle-valle@uib.no

Acknowledgements

The authors would like to thank the adults and children who participated in the study. We would also like to thank Merethe Wolff Lindvall for her feedback on the manuscript.

Conflict of interests and funding

None

Ethics and consent

The study was approved by the Regional Ethics Committee, reference number 2013/1281. Informed consent was obtained from, or on behalf of, all the participants in this study.

Abstract

ADHD is the most widely used psychiatric diagnosis for children today. From a biomedical standpoint the diagnostic process can be understood as the process of testing and revealing the individual child's neurological deficits. From a social constructionist perspective, the diagnostic process can be understood as a process of co-construction, where the perspectives and experiences of the adults involved play a central role. However, there is little research on the relational and temporal dynamics of restlessness, and little knowledge about restlessness as a co-constructed process unfolding in a specific context. As a contrast to an ADHD perspective in which restlessness is seen as a symptom of neurological pathology, children's restlessness can be described, explored and met as a form of vitality.

In this article, we present a case study of a group of five-year-old children participating in a community music therapy project in a Norwegian kindergarten. We outline the process of creating a musical performance in the local community. We describe the dynamics of these children's restless behaviours from the perspectives of three invested and participating adults. We describe how restlessness was an integrated part of this creative and collaborative process, which we outline in four phases: *Exploring musical vitality*, *Consolidating positions*, *Performing together* and *Discovering ripple effects*.

We discuss how restlessness can be understood as a co-constructed phenomenon unfolding within an ecological system, by drawing on qualities central to a community music therapy approach, namely participatory, resource-oriented, ecological, performative, activist, reflective, and ethics-driven qualities. We discuss whether it is possible to integrate a community music therapy perspective with an ADHD perspective on restlessness. We also outline some implications for current research and practice.

Keywords: ADHD, children, critical perspectives, music therapy

ADHD was first included in the *Diagnostic and Statistical Manual* (American Psychatric Association, 2013) in 1980, and the number of children diagnosed with ADHD has since dramatically increased in both the US and globally (Neufeld & Foy, 2006). Given the presence of ADHD in health care, education and everyday life, this diagnosis can be considered an internationally recognised framework for interpreting and handling children's restlessness [insert reference by first author]. Within ADHD, children's restlessness is understood as a symptom of neurodevelopmental pathology. From a social constructionist perspective, the diagnostic process can be understood as a process of co-construction, where the perspectives and experiences of the adults involved play a central role (Timimi, 2005). However, there is little research on the relational and temporal dynamics of restlessness, and little knowledge about restlessness as a co-constructed process unfolding in a specific context.

In this paper we reflect on the relational and temporal dynamics of children's restlessness during a community music therapy project. The children's participation was described by three invested and participating adults. In addition to reflecting on the children's participation, we have therefore included reflections on the positions and contributions of these three adults. Rather than understanding these children's restlessness as symptom of underlying pathology, we base our understanding on the more neutral concept *forms of vitality*. Forms of vitality can be defined as the coming together of five naturally occurring dynamic events: movement, time, force, space and intention/directionality (Stern, 2010).

As a form of vitality, restlessness can be included as an aspect of normal development. In this sense, restlessness should be facilitated as a natural and safe aspect of vital interaction (Johns, 2012). Children's natural musicality is arguably central to the development of cooperative awareness (Trevarthen, 2000), and musical experiences and musical relationships can be used as dynamic forces of change. In music therapy, such changes are facilitated by the therapist with the aim of optimizing the client's health (Bruscia, 2014).

The explicit focus of music therapy is to improve the health of the client. This is potentially a good fit with an individual and problem oriented approach to children's restlessness like ADHD. In relation to children's restlessness, music therapy has been used to improve children's academic performances (Camilleri, 2000; Chong & Kim, 2010; Steele, Vaughan, & Dolan, 1976), reduce their restless behaviours (Gold, Voracek, & Wigram, 2004; McCarty, McElfresh, Rice, & Wilson, 1978; Sausser & Waller, 2006), and treat ADHD (Miller, 2007, 2011).

In this article we will use case studies from music therapy to critically reflect on how children's restlessness has been described and handled, and how it can be understood. In order

to relate our discussion to a wider context, we will reflect on children's restlessness in relation to participatory and resource-oriented qualities, ecological and performative qualities, and activist, reflective and ethics-driven qualities. These qualities are central to a sub-discipline within music therapy called *community music therapy*. Community music therapy can be understood as a family of practices that are critical to mainstream music therapy practice (Ansdell, 2002), and that highlight the importance of context and social change (Stige & Aarø, 2012).

We will now present a review of music therapy case studies in which the author(s) have used the terms "restlessness", "hyperactivity", "impulsivity", "hyperkinetic", or "ADHD". We have been inspired by a critical interpretive approach as described by McFerran and colleagues (2016). We present the results from the review based on geographical region in order to the highlight contextual aspects of this research. After the critical and interpretive summary, we will present and discuss a case study from a community music therapy project in a Norwegian kindergarten. In Norway, most children start kindergarten at the age of 1 and attend kindergarten until they are 5 or 6, as this is when they start school.

Case descriptions from USA and Canada

Aigen (1991) describes Will, a musically and intellectually gifted eight year old boy, who was brought to therapy for fighting in school. Aigen describes the therapeutic process where he accesses Will's fantasy world through music. He describes how the music disappears, how it resurfaces as an exploration of Will's good and bad self, and ends up becoming a new beginning for Will. Finally Will seems to have outgrown and transcended some of his problematic behaviours, and Aigen reflects on how Will's problems can be related to unfortunate circumstances.

Herman (1991) describes Robbie, a likable little twelve-year old who has lived in twelve foster homes and two treatment centres before being admitted to a children's psychiatric hospital. Robbie considers himself the boy who nobody wanted. Herman describes his process as going through five stages: opening up, gaining expressive freedom, enjoying self-expression, learning structure, and being himself with others.

Hibben (1991) describes a special education group of children from 6 to 8 years, displaying destructive and disruptive behaviours. Some are medicated with psychostimulant, anti-epileptic or anti-depressant drugs. Hibben describes three stages in the therapeutic process: a pre-affiliation stage where the children vacillate between approach and avoidance, a power and control stage where the children jockey for power and status, and an intimacy stage where the children begin to practice new behaviours and show their needs.

Case descriptions from New Zealand and Australia

Rickson (2002) describes a 12-year old Maori boy, Adam, who is presented as likable, humorous and with practical skills. Adam is diagnosed with ADHD, has reduced intellectual capacity and lives with a family belonging to the lower socio-economic bracket. Adam's positive interactions increase somewhat and his negative interactions decrease very much as a result of music therapy.

In 2003, Rickson describes the case of a 12-year old boy, John, who has been removed from his single parent home because of severe neglect. He has several diagnoses, including ADHD, and rejects taking medication. The very challenging treatment process changes and broadens Rickson's therapeutic approach by taking her away from Creative Music Therapy and towards a humanistic psychodynamic approach. The process reveals John as a sensitive musician and skilled performer, and leads to John performing in the local school operetta.

McFerran (2009) describes Ben, a twelve-year-old boy diagnosed with ADHD and mild intellectual disability. He recently stopped taking medication and is referred to music therapy for aggressive behaviours in the classroom. Ben's unrealistic evaluation of his own musical skills leads to enthusiastic participation. Taking Ritalin makes this evaluation more realistic, but stops Ben from enjoying his own music. Ben shows a need to control the therapist, but through experiencing empowerment Ben become a more generous participant. Ben struggles with tension that arises as he transitions from music therapy to the controlled classroom setting.

Case descriptions from UK, Norway and Finland

Achenbach (2012) describes a different case: the development of a music therapy service for children and families in Scotland. The centre is also placement cite for music therapy students who amongst other things practice handling restlessness in groups.

Johns (2012) discusses how vitality affects can facilitate access to children's life worlds and create therapeutic change. She presents findings from a therapy with a traumatised girl, and argues why children should be able to explore restlessness as a natural and non-threatening dimension of vital expression.

Hakomäki (2012) presents a collaborative research project with a 14-year old boy, Nick, who reflects on his own therapeutic process between the ages of 7 and 9. Nick was sent to music therapy three years after losing his brother. At that time, he longed to die and struggled with restlessness in the classroom. Their collaborative retrospective reflection regarding Nick's recovery process is prompted by narrative pieces of music. Hakomäki calls

this method *storycomposition*, and her role is to write down the music and stories created by the child.

A reflexive summary and the focus of this article

The case studies presented here illustrate how restlessness has been dealt with in music therapy and related to problem behaviours, trauma, difficult family situations, creative talent, and children's innate potential to heal and survive. Many of the children described here are 'brought' to music therapy with the aim of facilitating better function in the classroom situation or in everyday life. In this sense, music therapy becomes a context in the child's ecological system that can afford different processes than the classroom or home situation. There are examples of how these different but connected ecological situations can create tension for the child, for instance in McFerran's case study of 12-year old Ben (2009) and in Aigen's case study of 8-year old Will (1991).

It is striking how often the children in these case studies are neglected or abused boys brought to music therapy for aggressive behaviours. From a constructionist perspective on ADHD, children growing up in 'Western' societies are understood on the basis of a polarized perspective on childhood: the victimized and innocent child who needs rescuing, and the impulsive, aggressive juvenile delinquent from which society needs protection (Timimi, 2005). A majority of the case descriptions tell the story of boys who are presented as delinquents in the classroom context and victims in relation to their family situation. The role of the music therapist seems to be to relieve, remove, or reduce the expression of aggregated pain and tension. In contrast to the other case descriptions, the publications from Norway (Johns, 2012) and Finland (Hakomäki, 2012) emphasize the victim pole, and do not present the child as delinquent. The approach described by Hakomäki (2012) is the most explicitly collaborative of all the studies.

In the case studies we have reviewed, the primary goal is arguably to facilitate change in the child. Cultural or systemic changes are rarely suggested, but examples include focusing on children's emotional needs and quality of life instead of behavioural change (McFerran, 2009), understanding children's restless behaviour as a natural expression that should be allowed (Johns, 2012), and requesting qualitative inquiries to increase the clinical relevance of research (Rickson & McFerran, 2007).

Cultural and systemic change is central to the family of practices that since the early 2000s has been referred to as *community music therapy* (Pavlicevic & Ansdell, 2004; Stige, Ansdell, Elefant, & Pavlicevic, 2010). In community music therapy, participation within an ecology of resources is key, and practice is driven by ethical reflection and activism (Stige &

Aarø, 2012). In line with this approach, the overall aim of this article is to promote a reflexive stance in relation to children's restlessness in music therapy. Our research question is:

How can children's restlessness be understood from a community music therapy perspective stressing children's participation in context?

Method

The data presented in this article were collected during a community music therapy project in a kindergarten in Western Norway. The focus of the case study is the interaction between a 5-year-old boy we call 'Paul', and his friends, 'John', 'George' and 'Ryan'. Other participants in the process included two music therapy students, 'Marsha' and 'Brian', two educational leaders, 'Klara' and 'Vera', and the first author of this article who also was the principal investigator (PI) of the research project. The kindergarten in which the project took place is situated in a local community that scored relatively low on measures of socio-economic status. The kindergarten staff had struggled with restlessness in Paul's group for several years, and the challenges seemed to increase when some of the boys got together.

Participants

As our intention was to learn more about restlessness as a human quality, all the thirteen children in the two five-year-old groups were invited to participate. We were interested in restlessness as a situated and ecological phenomenon, so the community music therapy project took place within the everyday context of the kindergarten. Participation was therefore determined by whether or not the child came to kindergarten that day.

The PI observed and participated in the community music therapy project, which was facilitated by the two music therapy students as part of their community music therapy practicum placement. Two music therapists employed by the Educational and Psychological Counselling Service supervised the students. Two educational leaders participated in the music therapy sessions and were involved in planning and facilitating the project through daily meetings.

Outline of the community music therapy project

In order to meet the children and familiarise ourselves with the setting, the two music therapy students and the PI visited the kindergarten two weeks before the music therapy project officially started. During the four weeks the project lasted, the students and the PI spent three days a week in the kindergarten, each visit lasting about three hours. These days normally started and ended with a meeting where the students, the educational leaders, and the PI reflected on the progression of the project. The music therapist supervisors participated in these meetings in the beginning and towards the end of the project.

Each project day began and ended with a semi-structured group session. In order to familiarise the children with the music therapy context and facilitate and welcome their motivation, interests and contributions, the students used both structured music games and improvisation. As the children grew more familiar with the context and their participation became more pronounced, the students relied less on structured play and improvised more. The children were also engaged through drawing, playing, or dancing. The pieces for the final performance were created in cycles: the children's contributions and expressions were interpreted and restructured by the music therapy students and brought back to the children, who then reacted to and commented on the work. These cycles were repeated until each child had a piece in the performance that they felt comfortable with, and proud of.

Throughout the project the students were urged to be mindful of the children's boundaries, and they did their best to avoid forcing the children into participating in a way that was too revealing or made them uncomfortable (Aasgaard, 2005). The project ended with two performances which consisted of eight pieces that included unique contributions from all the children. The students, the educational leaders, and the music therapy supervisors participated on stage during the performances, while the PI video recorded the performances from the audience.

The first performance took place in the room used for the music sessions in the kindergarten. The children's families, staff members from the local pedagogical resource centre, and from the local child and youth mental health services were invited to attend. The second performance took place in the gymnasium in the local school, and a group of children from the kindergarten and their teachers, the first graders and their teachers, the school principal and a few parents attended this second performance. One of the music therapists had prepared bags with Easter candy, which the principal handed out after a short speech in which she commented on the children's performances and welcomed them to school after the summer holidays.

Three weeks after the end of the project, the PI returned to the kindergarten to interview the children about their perspectives on the process. One week later the students returned to show the children and educational leaders a recording of one of the performances, and to say goodbye to the children. Three months later, the PI returned to the kindergarten to give each child a copy of the performance on DVD, and a printed version of the performance programme listing the different pieces with credits to the children who co-created these. After this visit, the PI had a final meeting with the kindergarten teachers where they read and

reflected on the transcripts of the interviews with the children, and reflected on the process of the project.

Data collection

Data collection was collaborative and multi-modal; the students and the PI kept research diaries throughout the project. The PI also videotaped the two performances, and interviewed the children and the educational leaders. We draw on all the data collected, but as we were interested in describing restlessness as a process, we have chosen to focus on observational notes from the three research diaries.

Ethical considerations

Ethical approval was obtained from the Regional Committee for Medical and Health Research Ethics. Parents were given relevant information about the background, intent, outline and potential risk of the study, and were informed about the confidential and voluntary nature of the study. For ethical reasons, informed consent sheets were distributed and collected by the kindergarten staff. All parents signed the agreement. All persons presented in this article have been anonymised.

Analysis

Our over-arching approach to the material is reflexivity, understood as a specific form of reflective research that involves reflection on several levels or that is directed at several themes (Alvesson & Sköldberg, 2000). As a concrete tool for analysis, we have used case description. A case description is an in-depth, intensive an sharply focused exploration of a phenomenon (Willig, 2008). We utilize an instrumental case study approach in that the case plays a supportive role in facilitating understanding (Stake, 1994).

The PI and the music therapy students co-collected the data. The excerpts presented in this article represent these three adult voices, and should not be read as an objective description. The analytic process consisted of several steps: The authors read and discussed the ethnographic material, and watched and discussed the videotaped performances. We followed Paul's story in particular as he was described by the kindergarten teachers as talkative, often changing between activities, shifting attention from one thing to another when teachers wanted him to stay on task, and as initiating playful behaviours that could sometimes be disturbing for others. Their descriptions fitted with some of the behavioural descriptions of attention deficit and hyperactivity in the ADHD diagnosis.

To facilitate contextualised reflections, we included descriptions of Paul's interactions in context, as described from the perspectives of the PI and the two music therapy students. The final text was revised by the educational leaders, the music therapists and the students.

Results

Paul's name appears 72 times in the three research diaries, which is the most frequently of all the children. Paul's friend John, who was also experienced by the kindergarten staff as being restless, was mentioned 66 times. We present the narrative as four overlapping phases: *Exploring musical vitality and cooperation*, *Consolidating positions, Performing together,* and *Discovering ripple effects*. The phase *Exploring musical vitality and cooperation* lasted the two first weeks of the project, and was the longest and perhaps most challenging phase in relation to restlessness.

Exploring musical vitality and cooperation

> *Diary of Principal Investigator (PI) Week 1, Day 1:* The three noisy boys went into a different room, and Klara, the educational leader, went with them. She joined their dance, and they started showing her that they could break dance. (…) The fact that they can break dance - we can use that in the performance.

The PI describes the boys' restless behaviour as 'noisy'. This might have been influenced by the stories we had heard from the educational leaders, who had struggled with handling this constellation of boys for several years. The educational leader Klara was interested in meeting the children in a playful way, and by participating with the boys on their own terms, she helped uncover their resources.

> *Diary of PI Week 1, Day 2*: George, Paul and John fool around a lot. (…) After a little while Brian got them down on the floor and made a song about the things they told him. They wanted to make a song about being good friends: that they rang the neighbours' door bell, that they couldn't go into the forest because they were worried about the "old woman with the staff"[1], and that they would go to the kiosk to buy waffles and ice cream.

> *Brian's Diary Week 1, Day 2*: Paul is still as eager as before in terms of playing music and playing games. (…) It seems that the children do not consider us as adults that must obey the rules of kindergarten. Paul and John went down the stairs during hide and seek, and when I found them they screamed quite loudly and created a lot of unrest for the rest of the group down there. Afterwards Paul took an apple without asking the adults if he could. This issue was quickly attended to by Vera, the educational leader, and she said that it was unusual for Paul to do something like this.

[1] Norwegian folk tale figure that appears in a song called *Kjerringa med Staven* (*The old Woman with the Staff*), where she is described as a quaint and rural figure living in an isolated valley, surviving on her own.

The PI describes the boys as ‘fooling around’ and Brian refers to Paul as ‘eager’. Through musical improvisation and play, the boys’ interests and personal characteristics emerge. Music therapy becomes as a space where change can happen, and where a new sense of community and set of rules has to be formed. The music therapy supervisors claimed it “had to get worse before it could get better”. The educational leaders, however, feared that the music therapy indirectly facilitated a process that would spiral some of the children into anti-social patterns of behaviour. Assigning responsibility for structuring the children was challenging. The students were responsible for their own practicum placement process, but had little experience. Their supervisors were experienced, but not always present, and also wanted to challenge the students. The PI was responsible for the research project, but was a participant observer. Negotiating structure, leadership and responsibility was to some degree delegated to the children:

> *Brian’s Diary Week 1, Day 3*: We introduced a microphone to the children. It was mostly unstructured, noisy and chaotic, as Paul and John wanted to fool around with the microphone and did not let the others have a go.

The lack of structure indirectly absolves Paul and John from guilt and shame; there are no rules they can break. Their behaviour is described as ‘fooling around’ and not ‘inobedience’. Their behaviour could also be called ‘exploration’, but this might not communicate the feeling of restlessness and frustration that ‘fooling around’ seems to do. At the end of the first project week, a well-functioning musical community is still a work in progress.

> *Brian’s Diary Week 2, Day 1*: We had a session with Paul and George, as John and Ryan were missing. The session was a bit amputated, but Paul seemed activated like before. George contributed with many ideas regarding songs they could sing and dance to, and we are going to use *Thriller*. We played this song a couple of times to find out what they could sing about. Paul and George quickly came up with suggestions about what was to be sung about them, but said “we have to wait with the lyrics for John and Ryan because they are not here”.

The absence of John and Ryan creates a better working environment, and the musical improvisation reveals a strong sense of community between the boys. Paul and George’s hesitation to create lyrics on behalf of their friends, show an understanding of unique

contribution. John and George want to protect John's and Ryan's right to tell their own story. Paul is noticed as being 'activated' and motivated.

> *Marsha's Diary Week 2, Day 2*: George, Paul, John and Ryan were really out of hand today. A true contrast to the session just before with the two girls. The four of them came in and were not prepared to follow instructions at all. No matter how much we tried, they were all over the place. Especially John and Paul. John was very concerned with deciding that the others should do as he said. Paul just wanted to climb up on the table and play with the instruments. The only one who took instructions and showed some interest for the things we had been doing on Monday, was George. He lit up the second we started talking about *Thriller*. Despite our repeated initiatives to make games or try to invite them into things, things just never fell into place. We did not scold them, and finally we just said that they had spent their time and that we had to switch groups. That made them a bit sour and dejected, and they said it had been a boring session because they didn't have time to play. (…) Paul and John, who had been very restless during their own session, were very cuddly and wanted to sit on Vera's lap during the goodbye song.

The students' loose structure also allows the children to experience the consequences of their own restlessness in terms of lack of focused attention and cooperation. According to the boys this was experienced as 'boring'. In the Norwegian language, 'boring' can be taken to mean 'too little stimulation', but also 'sad' or 'disappointing'. Their choice of words points to the efforts of the students and the situation that occurred, and deflects attention from their own contribution. The contrast between their unproductive restlessness and their subsequent need for care, rest and physical closeness is moving. It gives depth to the characters that so far have been described in terms of their restlessness, capability and independence.

Consolidating positions

> *Brian's Diary Week 3, Day 1*: We started with John, Paul, George and Ryan. John was still a bit down today. He was withdrawn during the run through of *Thriller* and was clearly bothered by something. The other boys worked very well together and worked really hard during their short session. Everyone made suggestions as we played and found out what they wanted to do. (…) During the refrain when we sing all their names, they put on a bit of an extra show. A great start to a great day.

The boys are motivated and work hard. Maybe experiencing the consequences of their actions combined with a strong motivation to perform put them on a productive track? John, however, is passive, dejected and lack motivation. Did he show us a vulnerability that we normally failed to see because of his restlessness? The rest of the group had discovered their ability to cooperate and be creative. Paul shows himself as a skilled improviser:

> *Marsha's Diary Week 3, Day 2*: At the very end today, when we were supposed to be finished, Paul suggested that we sang *The Sea is so calm*. We sang the song, and during the verse about the sea being so calm Paul suddenly sang: "The sea is so calm, in the night, the sea is so calm all night long" instead of "The sea is so calm, so calm, so calm, the sea is so calm" which is the original version. It's like he really feels the music, and does what comes to him musically.
> (…) Before the *Face song*, we invited Paul's to improvise in front of the other children. He concentrated with great effort and played with his whole heart. It was so real and so good that the others children were actually quiet and enjoyed themselves. At one point they started clapping to the beat. (…) He was really proud when he was finished, and smiled from ear to ear during the *Face song* afterwards.

Paul follows the shared structure, but finds room to improvise. His poetic suggestion increases the complexity of the song, intensifies the emotional tone and ambiance related to the ending of a session, and makes the song more interesting to sing. The music therapy students are able to offer him a space that is motivating, personal and shared. This change in position from fooling around to showing himself as a skilled improviser, show the others that he can engage in sustained and synchronised interaction. This position comes with an increased and more mature repertoire that broadens Paul's possibilities for interaction. The PI notes that Paul seems "calmer and warmer in his cheeks and more concentrated than in the beginning of the project". Based on Paul's ability to improvise during these sessions, the students invite him to improvise live on-stage during the performance.

Performing together

Marsha had been sick during the days running up to the performance. On the day of the first performance, she was well again and could re-join the group. Paul's greeted her with "Marsha! How nice to see that you are well again!"

> *Diary of PI Week 4, Day 2, Day of first performance*: Paul took quite a long time to start playing; it looked like he had a plan and couldn't decide where to start. One of the students offered him a small recorder. Shortly after, she invited him to play on the bells. When none of these got him going, I offered him set of drumsticks. One of the students tapped gently on the drum, and this was probably the cue he needed, because that seemed to get him going. He played elegantly on the small drum and had a bell in his left hand. During the dress rehearsals, he had used the rhythm cauliflower and several other instruments and played with more vigour. It is brave of him to improvise like this, but the children were patient and made it into a good session after all.

Paul's improvisation is spontaneous, planned, and dependent on collaboration and timing. The students, the music therapist and the PI do their best to facilitate and support Paul's performance. Paul plays with a narrower use of instruments and with less vigour than during

rehearsals, but is still able to show his playfulness and musical talent. The other children in the group and the audience support him by being attentive, patient and by applauding at the end of his piece.

Discovering ripple effects

By being in the audience, Paul's parents were able to witness and take part in a different side of Paul, and they get to experience him as skilled, independent and mature:

> *Diary of PI Week 4, Day 2, Day of first performance*: We had a good chat with Paul's parents. They got to hear about all the good impressions we have had of Paul and the good interaction we have experienced. We told them how talented Paul is, socially sensitive and attentive in his interactions with others, and that he seems to have a passion for entertaining others. The mother had tears in her eyes during our conversation; I think she was a bit overwhelmed by all the positive comments. (…) The mother said it was a big deal for her to see him on stage; it was unfamiliar and he looked very concentrated and mature. She was very happy, and so was the father.

The performance creates an opportunity to reflect on Paul's performance with his parents and a staff member from the local pedagogical resource centre. Paul's parents wanted him to continue music therapy, and this conversation revealed a need for both structures and resources in the local environment. The mother was the most verbal about Paul's process and change, or at least the PI reports her reactions and reflections with more emphasis than the father's reactions and reflections.

The educational leaders revealed that they felt the project had been quite exhausting and more resource demanding then they had expected. Still they were very pleased with Paul's development and felt that this had "made it all worth it". About a month after the end of the community music therapy project, the students visited the kindergarten to say goodbye to the children, and share a recording of the performance:

> *Marsha's Diary, One month after last performance*: When the break show started, George and Paul became very excited. They thought it was really cool. They didn't say much, but paid close attention. (…) [When the film ended] some of the children ran out again quickly because they wanted to play. Paul stayed behind, together with two of the other children. Vera, the educational leader, asked if he was going to miss us. Paul said that he didn't need to miss us, because he could watch the film every time he thought about us. That way, he was able to see us. And we could do the same if we missed them. He said that he would show the performance to his children, and that his children would get the DVD so that they could show it to their own children. During the film at one point, George said that it was boring to watch. Then Paul answered very clearly: "I think it is a lot of fun, myself!"

The project had seemed like it had been meaningful for Paul, and he talked about it like it was already a part of his identity and personal narrative. Paul even outlines how the project can have ripple effects on an ecological timeline into the future, as part of his personal legacy.

Discussion

The community music therapy project created a space in which many relations that normally belong to different ecological contexts were performed simultaneously: Paul's family, the kindergarten, music therapy education, music therapy practice, special education practice, the mental health services and research. Community music therapy can be considered a family of contextualized practices, rather than one uniform perspective or practice. Thus, the research question explored in this article can have many answers, depending on the researcher, the participants and the context of the project. Stige and Aarø (2012) have used the acronym PREPARE to describe qualities central to a community music therapy approach: participatory, resource-oriented, ecological, performative, activist, reflective and ethics-driven. These qualities can be found within a wide range of music therapy practices, but the *combination* is arguably unique to community music therapy. We will now reflect on findings from the literature review and our own case study by using the qualities described in PREPARE.

Reflecting on participatory and resource-oriented qualities

ADHD was a topic for both the research project and for the kindergarten. The kindergarten worried that several of the boys might be given an ADHD diagnosis when they started school, and the research project was initially thought of as a possible preventative system intervention for ADHD. Central to the ADHD diagnosis is the individual child's problems with attention, hyperactivity, and impulse control (American Psychatric Association, 2013). In line with this focus, the PI, Brian, and Marsha also gave problem- and individual-oriented descriptions of Paul's participation, especially during the phase *Exploring musical vitality and cooperation*: "the three noisy boys", "not prepared to follow instructions", "created a lot of unrest", and "restless". Other problem-oriented descriptions in this phase refer to cooperative aspects: "fooling around", "the session was unstructured, noisy and chaotic", "really out of hand today", "all over the place", and "things never fell into place". There are also resource-oriented descriptions of Paul's participation during this phase: "activated", "eager", and "cuddly".

During the phases *Consolidating positions* and *Performing together,* Paul and the cooperative aspects of the situation are described more in terms of resources and constructive

participation: “Everyone made suggestions”, “A great start to a great day”, “concentrated with great effort and played with his whole heart”, “sweet”, “he played elegantly”, and “brave”. In other words: problem descriptions dominate the first phase of the project, but as positions start to consolidate and the focus becomes that of performing together, the descriptions become more resource-oriented and the children’s participation is described as well-functioning. In relation to ADHD, this development would mean that neuro-developmental dysfunctions have been restored or that the situation has changed in such a way that the neurodevelopmental disorder has become more hidden and less dysfunctional. By looking at the same development from a community music therapy perspective, one could say that exploring a new territory together can be challenging, yet important in allowing children’s participation and in discovering their resources.

The critical interpretive literature review shows that a dominating focus in music therapy research has been the individual child’s problematic behaviour, a focus that is compatible with a diagnostic approach. ADHD doubled in prevalence in North America between 1990 and 1995 (Neufeld & Foy, 2006). Several of the case descriptions published after 1991 (Hibben, 1991; K. McFerran, 2009; Miller, 2011; Rickson, 2006) use the ADHD diagnosis to describe the child and in setting goals for therapy. However, these studies also contain descriptions of context and resources. The case descriptions from Europe (Achenbach, 2012; Hakomäki, 2012; Johns, 2012) do not include the ADHD diagnosis, but describe restlessness in relation to existential experiences, vitality, meaning, and group dynamics.

Reflecting on ecological and performative qualities

Paul’s behaviours were at times experienced by the kindergarten staff as challenging, resource demanding, and as a source of worry. Understood in the context of ADHD, his restless behaviour could be seen as symptoms of a neurodevelopmental disorder that could become a serious dysfunction as he transitioned into the school system. From a community music therapy perspective, the restlessness could be understood as the performance of relationships between Paul and the people, spaces, objects, and structures that made up his ecological system. By offering Paul other qualities in these relationships, for instance by inviting him to improvise musically, Paul had the opportunity to perform his relationships in a different way. Working together towards a public performance, created structured and motivation. In contrast to an ADHD perspective, a community music therapy perspective relates Paul’s restlessness to the process of performing relationships in context, and highlights the importance of cooperation within and between ecological systems.

Children diagnosed with ADHD in the case studies reviewed here, are often boys in difficult life situations who struggle with social relationships and academic performance. Many of them are medicated for their behaviours or problems, and they live their life at the lower end of the socio-economic bracket. Working with the reciprocal relationships between individuals, groups, and networks in social context are central to the ecological quality of community music therapy (Stige & Aarø, 2012). In addition to this, an ecological perspective allows for reflection on perhaps less visible structures at the macro level like knowledge paradigms, legislation, and politics [Inset reference of first author].

In the literature presented here, the relationship between the children their ecological systems are characterised by what can be understood as a lack of reciprocity. The main focus in many of the cases seem to be to relieve the child from suffering and to help the child make the best of the existing and unfortunate context. One way of doing this is to reduce the expression of restless behaviours. There are examples, however, of how music therapy facilitates reciprocity. For instance, Will is given the opportunity to enjoy musical interaction with his mother and her therapist (Aigen, 1991), and Ben (K. McFerran, 2009) and John (Rickson, 2003) are given the opportunities to receive validation and applause for their musical performances. In these cases, the music therapy context serves two potentially conflicting purposes: it is a space for validating self-expression and building reciprocal ecological relations, but it is also a context for reducing what is defined as negative behaviour in the systems surrounding the child.

There are also descriptions of how the process of moving between ecological contexts can be a source of restlessness. For instance, McFerran (2009) describes how music therapy unintentionally adds stress to Ben's life as he has to transition back into the controlled setting of the classroom. McFerran describes how stimulant medication increases Ben's realistic perception of himself and his abilities – a positive change from an educational perspective – but how it *simultaneously* hinders enjoyment and exploration; a negative change from a music therapy perspective. In other words, the stimulant medication *simultaneously* enhances and inhibits Ben's ability to function.

Reflecting on activist, reflective and ethics-driven qualities

Marsha and the PI describe their own efforts to scaffold Paul's improvised performance. The PI writes:

> One of the students offered him a small recorder. Shortly after, she invited him to play on the bells. When none of these got him going, I offered him set of drumsticks. One of the students tapped gently on the drum, and this was probably the cue he needed, because that seemed to get him going. He played elegantly on the small drum and had a bell in his left hand.

In an excerpt from Marsha's diary not included in the results above, she writes:

> He spent a lot of time finding something to play. At first it looked as if he was just going to sit there and move the instruments around and not get started. (…) Brian and I tried to help him into playing, and tried to get him started. But he did everything in his own pace and suddenly he started playing.

These two descriptions highlight the adults' participation and provide two related, but different explanations of why Paul starts playing. Both the PI and Marsha seem to notice their own actions and efforts, and use these observations to explain Paul's behaviour in different ways. Paul's own perspectives and motives are hard, if not impossible, to observe, and therefore get pushed to the background.

By focusing on one's own efforts and intentions and overlooking others', one ends up presenting a narrow and limited picture of a situation. As observers we typically place too much emphasis on personal factors and overlook important contextual factors, an attribution bias that in social psychology is referred to as the *fundamental attribution error* (Ross, 1977). The language and behavioural descriptions in the ADHD diagnosis supports this natural tendency to overrate the importance of personal qualities. In contrast, a community music therapy perspective might stimulate reflections about contextual factors and thereby counteract this common bias, but this perspective is also mediated by adult individuals that naturally focus on their own observations and experiences. The research diary descriptions of Paul can be taken as an illustration of how contextual reflections are difficult to make in the moment, which underlines the importance of a reflexive focus in supervision and research.

In the music therapy literature reviewed, ADHD, "lack of attention" or "hyperactive" are included as seemingly neutral concepts. Few explicitly critical voices were present in this research. However, Rickson and McFerran see the need for more in-depth and qualitative research on music therapy in special education, as this field traditionally has drawn heavily on behavioural principles (Rickson & McFerran, 2007). From a meta-perspective, the link between restless problem behaviours and dysfunctional and marginalising aspects of their ecological systems become evident. Some of the authors do indeed reflect on restlessness as a performance of ecological relationships, for instance Aigen (1991) who discusses Will's problems as a function of difficult circumstances.

Children's rights to participate and be protected from harm are described in the Convention on the Rights of the Child (United Nations, 1989). These rights are central to a community music therapy approach. Facilitating children's rights in practice, however, is a complex process. "Giving children voice" or "attending to unheard voices" is an ethical ideal

in community music therapy, but separating children's voices from one's own perspectives and experiences is challenging. According to a survey conducted in the US, music therapists involved in the treatment of early elementary school children diagnosed with ADHD are generally happy with the outcomes of music therapy (Jackson, 2003). This can be interpreted in many ways, but reveals that systemic change is generally not considered an outcome of music therapy. This points to an ongoing and unsolved ethical dilemma in music therapy research on ADHD: we need to address the fact that many of these children struggle to survive in ecological systems that marginalize their participation.

Summary and conclusion

We have in this article used a community music therapy perspective to explore restlessness as a co-constructed and dynamic phenomenon. We argue that this perspective can contrast and inform the problem- and individual-oriented understandings facilitated by an ADHD-perspective. In the body of music therapy research presented here, ADHD is often used to describe the individual child's problems, and is generally presented as a neutral or objective description of children's restless behaviours. Using our own case description as an example, we have argued that community music therapy can be useful when working towards enhanced mutual relationships between the individual and his or her ecological systems. In contrast to individual- and problem-focused understandings, understandings that include participation, resources, ecology, performance, activism, reflexivity and ethics, can shed light on adult and systemic contributions to children's restlessness.

References

Achenbach, C. (2012). Nordoff-Robbins Music Therapy in a Nursery Setting. In J. Tomlinson, P. Derrington, & A. Oldfield (Eds.), *Music Therapy in Schools. Working with Children of All Ages in Mainstream and Special Education*. London and Philadelphia: Jessica Kingsley Publishers.

Aigen, K. (1991). Creative fantasy, music and lyric improvisation with a gifted acting-out boy. *Case studies in music therapy*, 109-126.

Alvesson, M., & Sköldberg, K. (2000). *Reflexive Methodology*. London: SAGE Publications.

American Psychatric Association. (2013). *Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition*. Arlington, VA: American Psychiatric Association.

Ansdell, G. (2002). Community Music Therapy & The Winds of Change. *Voices: a World Forum for Music Therapy, 2*(2).

Bruscia, K. E. (2014). *Defining Music Therapy. Third Edition*. University Park, IL: Barcelona Publishers.

Camilleri, V. (2000). Music Therapy Groups: A Path to Social-Emotional Growth and Academic Success. *Educational Horizons, 78*(4), 184-189.

Chong, H. J., & Kim, S. J. (2010). Education-oriented Music Therapy as an after-school program for students with emotional and behavioral problems. *Arts in Psychotherapy, 37*(3), 190-196. doi:10.1016/j.aip.2010.03.004

Gold, C., Voracek, M., & Wigram, T. (2004). Effects of Music Therapy for Children and Adolescents with Psychopathology: A Meta-analysis. *Journal of Child Psychology and Psychiatry, 45*(6), 1054-1063.

Hakomäki, H. (2012). Storycomposing as a method in music therapy. A collaborative experiemtn with a young co-researcher. In G. Trondalen & K. Stensæth (Eds.), *Barn, musikk, helse* (Vol. 3). Oslo: Norges Musikkhøyskole.

Herman, F. (1991). The boy that nobody wanted: Creative experiences for a boy with severe emotional problems *Collected Work: Case studies in music therapy. Published by: Phoenixville, PA: Barcelona, 1991. ISBN: 978-0-9624080-1-4; 0-9624080-1-8. Pages: 99-108. (AN: 1992-11138).*

Hibben, J. (1991). Group music therapy with a classroom of 6-8 year-old hyperactive-learning disabled children. In K. E. Bruscia (Ed.), *Collected Work: Case studies in music therapy. Published by: Phoenixville, PA: Barcelona, 1991. ISBN: 978-0-9624080-1-4; 0-9624080-1-8. Pages: 175-189. (AN: 1992-11138).*

Jackson, N. A. (2003). A Survey of Music Therapy Methods and Their Role in the Treatment of Early Elementary School Children with ADHD. *Journal of Music Therapy, 40*(4), 302-323.

Johns, U. T. (2012). Vitalitetsformer i musikk og kommunikasjon. In G. Trondalen & K. Stensæth (Eds.), *Barn, musikk, helse: skriftserie fra Senter for musikk og helse* (Vol. 3): Norges Musikkhøyskole.

McCarty, B. C., McElfresh, C. T., Rice, S. V., & Wilson, S. J. (1978). The effect of contingent background music on inappropriate bus behavior. *Journal of Music Therapy, 15*(3), 150-156.

McFerran, K. (2009). Quenching a Desire for Power: The Role of Music Therapy for Adolescents With ADHD. *Australasian Journal of Special Education, 33*(1), 72-83.

McFerran, K. S., Hense, C., Medcalf, L., Murphy, M., & Fairchild, R. (2016). Integrating Emotions Into the Critical Interpretive Synthesis. *Qualitative Health Research, 1*(11). doi:DOI: 10.1177/1049732316639284

Miller, E. B. (2007). Getting from psy-phy (psychophysiology) to medical policy via music and neurofeedback for ADHD children. *Dissertation Abstracts International: Section B: The Sciences and Engineering, 68*(3-B), 1977.

Miller, E. B. (2011). The brain-jamming for focus finale: Helping ADHD children with bio-guided music therapy. *Collected Work: Proceedings: 13. World Congress of Music Therapy. (AN: 2011-19799). 9*(1), 164-165.
Neufeld, P., & Foy, M. (2006). Historical reflections on the ascendancy of ADHD in North America, c. 1980 - c. 2005. *British Journal of Educational Studies, 54*(4), 449-470.
Pavlicevic, M., & Ansdell, G. (2004). *Community Music Therapy*. London and Philadelphia: Jessica Kingsley Publishers.
Rickson, D. J. (2002). Adam: A case study of an adolescent boy. *Annual journal of the New Zealand Society for Music Therapy*, 51-60.
Rickson, D. J. (2003). The boy with the glass flute. *Voices: A world forum for music therapy, 3*(2).
Rickson, D. J. (2006). Instructional and Improvisational Models of Music Therapy with Adolescents Who Have Attention Deficit Hyperactivity Disorder (ADHD): A Comparison of the Effects on Motor Impulsivity. *Journal of Music Therapy, 43*(1), 39-62.
Rickson, D. J., & McFerran, K. (2007). Music Therapy in Special Education: Where Are We Now? *Kairaranga, 8*(1), 40-47.
Ross, L. (1977). The Intuitive Psychologist and His Shortcomings: Distortions in the Attribution Process. In L. Berkowitz (Ed.), *Advances in Experimental Social Psychology*. New York, San Fransisco, London: Academic Press.
Sausser, S., & Waller, R. J. (2006). A model for music therapy with students with emotional and behavioral disorders. *The Arts in Psychotherapy, 33*(1), 1-10.
Stake, R. E. (1994). Case Studies. In N. K. Denzin & Y. S. Lincoln (Eds.), *The SAGE Handbook of Qualitative Research*. London: SAGE.
Steele, A. L., Vaughan, M., & Dolan, C. (1976). The School Support Program: Music therapy for adjustment problems in elementary schools. *Journal of Music Therapy, 13*(2), 87-100.
Stern, D. N. (2010). *Forms of Vitality: Exploring Dynamic Experience in Psychology, the Arts, Psychotherapy, and Development*. Oxford: Oxford University Press.
Stige, B., Ansdell, G., Elefant, C., & Pavlicevic, M. (2010). *Where music helps: community music therapy in action and reflection*. Surrey: Ashgate.
Stige, B., & Aarø, L. E. (2012). *Invitation to community music therapy*. New York: Routledge.
Timimi, S. (2005). *Naughty boys: anti-social behaviour, ADHD and the role of culture*. Hampshire, UK, and NY, USA: Palgrave McMillan.
Trevarthen, C. (2000). Musicality and the Intrinsic Motive Pulse: Evidence from Human Psychobiology and Infant Communication. *Musicae Scientiae, 3*(1 suppl), 155-215. doi:10.1177/10298649000030s109
UN Convention on the Rights of the Child: Adopted and opened for signature, ratification and accession by General Assembly resolution 44/25 of 20 November 1989 entry into force 2 September 1990, in accordance with article 49, (1989).
Willig, C. (2008). *Introducing qualitative research in psychology. 2nd ed.* Berkshire, England: McGraw Hilll Open University Press.
Aasgaard, T. (2005). Assisting Children with Malignant Blood Diseases to Create and Perform their Own Songs. In F. Baker & T. Wigram (Eds.), *Songwriting: Methods, Techniques and Clinical Applications for Music Terapy Clinicians, Educators and Students*. London, UK
Philadelphia, USA: Jessica Kingsley Publishers.