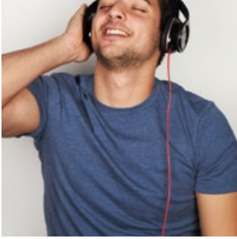
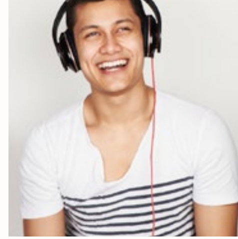
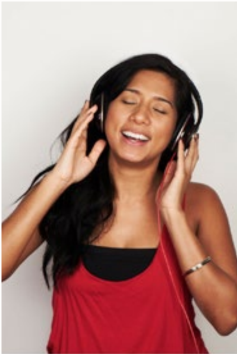


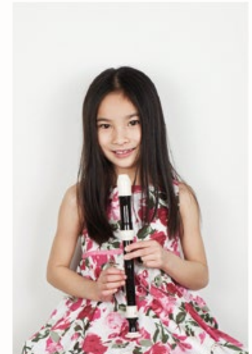


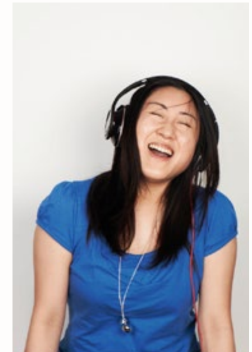
MUSIC, HEALTH AND WELLBEING

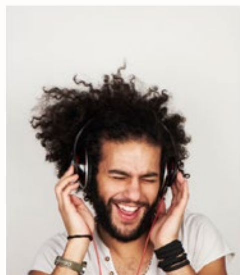
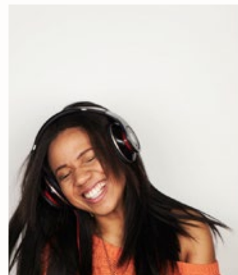
EXPLORING MUSIC FOR HEALTH EQUITY AND SOCIAL JUSTICE

Edited by Naomi Sunderland, Natalie Lewandowski, Dan Bendrups, and Brydie-Leigh Bartleet







Music, Health and Wellbeing

Naomi Sunderland
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Music, Health and Wellbeing

Exploring Music for Health Equity and Social Justice

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To those who sing, play and participate. To those who encounter the most challenging of circumstances. To those who activate, advocate and have the courage to reimagine. This book is for you.

Foreword

As someone who knows remarkably little about music in any academic or practical sense, I found it an intriguing task to prepare the foreword for this book. My knowledge of health comes from a research career spent trying to identify what are usually referred to as the social determinants of health, which actually embraces just about every aspect of life except medical care and genetics. What makes the links between music and health interesting for me is that one of the big changes in our understanding of health during my career is the recognition of the central role of so-called psychosocial factors as determinants of health. Although psychosocial is a catchall term for the psychological impact of our perception and experience of our circumstances and social relationships, what interests health researchers particularly is how social experience affects stress. Long periods of stress have effects which have been likened to more rapid ageing. Stress changes physiological priorities, not only mobilising resources in a 'fight or flight' response to some emergency, but also downregulating other physiological processes that are not essential while dealing with an immediate threat. These include factors such as tissue maintenance and repair, growth, reproductive functions, immunity and digestion. At the same time, the cardiovascular system and mental processes of alertness are upregulated. None of this matters if the emergency is over after five minutes or an hour. But if we continue to feel stressed

over weeks and months and years, we become more vulnerable to a wide range of diseases and forms of degeneration.

Although the loss of a close relationship, job or family home are hugely stressful events, research has made us increasingly aware that some of the most important sources of stress, across the population as a whole, are issues around identity and social relationships—whether you feel relaxed and at ease with others or whether you tend to avoid social contact because it provokes anxiety. Researchers found that health and longevity are substantially better among people who have more friends and are more involved in social and community life. A study that combined the data from 150 studies of health and friendship found that having more friends and social connections is at least as important to survival as not smoking. Others have shown that having a poor relationship with your spouse or partner slows wound healing, and that when people are given the same measured exposure to cold infections those with fewer friends are three or four times as likely to catch a cold.

My own work—on how larger or smaller income differences between rich and poor affect the health of whole populations—seems to hinge on the same issues. Greater inequality makes us judge each other more by status, as if external wealth was a measure of internal worth. As a result, we all become more worried about how others judge us, about appearances and the impression we create. Social contact becomes more of an ordeal.

Against this background who would have guessed that one of the most important applications of modern science and technology would have been to allow us all to listen to or share music whenever and wherever we are? The social and emotional power of music is used as a kind of self-medication on a vast scale. But music is used not simply to relax. It expresses a wide variety of emotions: feelings of sadness as well as happiness, grandeur and triviality, nostalgia, romance, delicacy and forcefulness to name but a few. But people do not associate musical expression with all emotions. An empirical study found that there were a group of 'nonmusical' emotions which people did not connect with music. These included guilt, shame, contempt, embarrassment and jealousy. Although these are very strongly expressed in some music—most obviously in some opera plots—they are not emotions people look to music for, and they are clearly the divisive emotions which we have too much of in everyday life.

Emotional experience through music is, of course, not the same as one's own experience of the same emotions. Hearing a piece of music does not provoke you into action in the same way that one's own feelings of romance, joy or sadness do. In the words of Zentner, Grandjean and Scherer (2008), "When listening to music … people tend to become self-forgetful and somewhat detached from everyday concerns. A clear expression of this detachment is that 'dreamy' was among the most frequent emotive ways people described their emotional responses to music." They suggest that music enables "people to move into a mental state in which self-interest and threats from the real world are no longer relevant". Perhaps the therapeutic use of music allows people to experience emotions safely, at one remove.

There is, however, more to it than that—and certainly much more than a newcomer to the field like myself is aware of. Because the emotions are expressed in the music, rather than welling up in one's own psyche alone, it means that they are no longer a private experience but part of what connects us to others. They are shown to be part of our common humanity, shared with others. It is almost as if it reunited us as part of an emotional community. Music is perhaps an antidote to anomie and apathy.

Like the arts more widely, music also has a political and moral function. At their best, the arts move us by being fundamentally on the side of humanity, cutting through the cant, bravado and pomposity, whether in Goya's pictures of the awfulness of war, Rembrandt's unadorned self-portraits, the artists who drew attention to the otherwise invisible peasantry or workers, the yearning expressed in spirituals for some kind of release from slavery or, more recently, in Jimi Hendrix's tortured version of the *Star Spangled Banner* played in 1969 while the USA was still wracked by the Vietnam War, or Bob Marley's *Get Up Stand Up*.

Great art expresses our humanity and how, in so many ways, it is hidden or denied, how people are devalued or downtrodden and how we wish for something better. But all too often the arts fall far short of this. Music has been used to send people to war, to provide advertising jingles, to lure people into a false sense of complacency or, indeed, for whatever might attract money and fame. Against that background, the sharp social commentary of Banksy (see http://banksy.co.uk/menu.asp) stands as a wonderful counter example.

To build a movement capable of producing a society which is qualitatively better for all of us, we desperately need popular arts that look below the surface, see through the superficial commercial representation of what life is about and make us more aware of our true needs and what stands between us and their realisation. Through its ability to touch our fundamental humanity, music has a role to play not simply in individual, but also in public health and in health inequalities. It can encourage people, as it did in the 1960s, to embrace the social and political changes that will move us towards a fairer and healthier world. Whether it actually does so will depend on the social purpose and political commitment of musicians and their educators.

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Reference

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Introduction: Exploring Music for Social Justice and Health Equity

Naomi Sunderland, Natalie Lewandowski, Dan Bendrups, and Brydie-Leigh Bartleet

Worldwide, there is growing recognition that health equity is everybody's business. While there will always be a role for clinical health practices that require specialised expertise, there is increasing acknowledgement of the significant role musicians and music facilitators can play in the process of promoting health equity and music for all. Alongside health professionals, educators, policymakers, researchers and musicians are responding to this call and working towards health equity and social justice by facilitating active making music across a wide range of contexts. This book directly responds to this growing momentum and extends our understandings of the links between music and health beyond merely "managing" illness towards considerations of how music can play a fundamental role in shaping the social, economic and cultural determinants of health and ill health in the first place. As editors, we are delighted to

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bring forward the unique collection of chapters you are about to read on this topic. This book is the culmination of over four years of collaboration and connection at the Queensland Conservatorium, Griffith University, Australia, where we have sought to tread new ground in contemporary international arts-health scholarship and practice by examining how far the benefits of music making and arts practice more generally can reach along a continuum between individual and societal or "population" level health and well-being outcomes.

International policymakers and researchers have long acknowledged the role of social, environmental and cultural factors in shaping individual experiences of health and well-being, reflecting the World Health Organization's long-standing definition of "health" as a "state of complete physical, mental and social well-being and not merely the absence of disease or infirmity" (WHO 1946/1995, p. 1). Increasingly, research shows that individual health and well-being is determined by complex individual, social, political, economic and environmental determinants (see e.g. Marmot and Bell 2012; Wilkinson and Pickett 2009). As Williams et al. (2008, p. S8) state, "health is more a function of lifestyles linked to living and working conditions than of healthcare". The "social determinants of health" (SDOH) that shape living and working conditions are commonly understood along a continuum ranging from "macro" or "upstream" societal-level determinants, such as the natural environment, dominant ideologies, historical factors, equality and inequality, human rights and government policies through to institutional, community- and individual-level factors such as housing and shelter, employment, education, social inclusion, relationships, inherited chronic disease, mental health, personal happiness and hope. This continuum of health determinants has intimately informed the way we have conceived of and presented the chapters in this book.

Strategies for addressing the SDOH have been recognised internationally, both as a way of preventing ill health in the future and addressing pervasive health inequities (Marmot and Wilkinson 2005). International agreements such as the World Health Organization's *Declaration of Alma-Ata* (1978), *Global Strategy for Health for All by the Year 2000* (1981), *Ottawa Charter on Health Promotion* (1986) and *Jakarta Declaration on Leading Health Promotion into the 21st Century* (1997) all reinforce that social, environmental and economic factors and inequalities are the

primary determinants of an individual's health and well-being. In essence, these policies and strategies recognise that blaming an individual for "lifestyle choices" such as smoking and lack of exercise will not make a positive contribution to international and national health problems because this does not address the social and economic inequalities at the core of these behaviours.

As our chapter contributors, Don Stewart and Yoon Irons (see chapter "Music, Public Health, and Health Promotion: Can Music Be a Social Determinant of Health?") and Naomi Sunderland, Lauren Istvandity, Ali Lakhani and Caroline Lenette (see chapter "Community Music Research and Evaluation Through a Social Determinants Lens") observe, current SDOH models and frameworks from within the disciplines of public health and health promotion do not typically acknowledge culture or the arts as significant SDOH. This book is one of the first concentrated attempts to remedy this situation and explore the potential for music and related art forms to contribute to promoting positive SDOH, alleviating negative SDOH, and in doing so contribute to health equity and social justice more broadly. It also signals the ways in which engaging with music making can deepen a musician's understandings of their practices and indeed their roles within contemporary society. *Music, Health, and Wellbeing: Exploring Music for Health Equity and Social Justice* establishes the understanding that outside of clinical health practices that require specialised expertise, health and well-being are "everybody's business". In doing so, the volume strongly responds to international health promotion and arts-health policies and agreements that seek to mobilise the arts to promote health and well-being for all (see e.g. Cox et al. 2010; Standing Council on Health and the Meeting of Cultural Ministers 2013; Wreford 2010).

Key Concepts

This volume adopts an explicit and novel social justice, health equity and social determinants of health approach to music for health and well-being (see Marmot and Wilkinson 2005; Raphael and Bryant 2006; Schulz and Northridge 2004). The following paragraphs briefly explore how we define each concept.

Social Justice

In this volume, social justice is strongly linked with the concepts of health equity and SDOH. In seeking social justice through music making and associated practices, we acknowledge that different groups within our societies are not equal and, indeed, that some will prosper from and control the same social and economic systems that both overtly and covertly devalue, exclude and harm others. While some of us are automatically privileged by the systems, circumstances and environments that govern and shape our collective lives, others are systematically disadvantaged by these things (see e.g. Crenshaw 1991; Goodman 2011). In health terms, we know for example that residents in wealthy areas are far less likely to be exposed to negative environmental determinants of health such as forced removal, pollution, violence, racism and overcrowding. Residents in poor neighbourhoods, by contrast, are far more likely to be exposed to these things (see e.g. Schulz and Northridge 2004). At the same time, we know that unequal societies produce negative outcomes across the full spectrum of advantage and disadvantage: we are all worse off in more unequal societies (see Wilkinson and Pickett 2009).

Social justice offers a "social model" of disadvantage in the same way that the SDOH approach provides a "social model" of health—one that moves away from blaming individuals for their lot in life towards acknowledging the complex socio-historical and economic factors that shape all of our lives for better and worse. A social justice approach assumes that social and economic disadvantage is not "inherent" to particular individuals and groups because they are "less than" others (as e.g. ableism, sexism or racism would assume), but, rather, that that disadvantage is due to social, political, economic and cultural choices that are socially reproduced over time (Goodman 2011).

In seeking social justice, we are often concerned with distributive justice: putting in place formal mechanisms via which those who are disadvantaged within a system may come to take a more equitable place in society and achieve a better quality of life (Miller 1999). But in exploring music for social justice, we are not only interested in redistributing

opportunity for health and flourishing within a fundamentally unjust social system. We are also interested in how music making and the arts more generally can facilitate *radical re-imagination* of, and challenge to, fundamentally unjust social systems that produce negative health and well-being outcomes for all, but particularly the most disadvantaged members of societies (see Alfred 2010; Benedict et al. 2015; Wilkinson and Pickett 2009). In order for this to happen, Sloboda (2015) argues that social justice approaches to music making need to be scalable and sustainable rather than "one-off" interventions. For Sloboda (2015), good intentions and hope are not sufficient for music to address social justice goals. A wider roll-out is needed as otherwise musicians and facilitators risk failure to have substantive influence on addressing inequities in the wider world. Authors such as Clive Parkinson (see chapter "Weapons of Mass Happiness: Social Justice and Health Equity in the Context of the Arts") head such calls and are international leaders in radically imagining the field of arts and health at this point in time. As a collective of engaged scholars and practitioners, the authors and editors of this volume ask: What is the role of music making and associated practices in alleviating and challenging social injustice and moving societies towards health promoting—rather than health impeding—forms of seeing and being?

Health Equity

Health equity can be defined by the absence of significant disparities in experiences of health and well-being—and the social determinants of health—between peoples of the world (Braveman and Gruskin 2003). The level of health equity in a society is a by-product of the level of social justice. Health equity exists when all peoples have equal opportunity to achieve health and well-being as determined by the circumstances that shape their lives. In 2008, the World Health Organization's Commission on Social Determinants of Health (WHO CSDH) called for the world's governments to "lead global action on the social determinants of health with the aim of achieving health equity" (2008, p. 1). In the Commission's words:

> Social justice is a matter of life and death. It affects the way people live, their consequent chance of illness, and their risk of premature death. We watch in wonder as life expectancy and good health continue to increase in parts of the world and in alarm as they fail to improve in others. … Differences of this magnitude, within and between countries, simply should never happen. These inequities in health, avoidable health inequalities, arise because of the circumstances in which people grow, live, work, and age, and the systems put in place to deal with illness. (CSDH 2008, p. 1)

To improve health equity, the Commission's recommendations were to (1) "Improve the conditions of daily life—the circumstances in which people are born, grow, live, work, and age"; (2) "Tackle the inequitable distribution of power, money, and resources—the structural drivers of those conditions of daily life—globally, nationally, and locally"; and (3) "Measure the problem, evaluate action, expand the knowledge base, develop a workforce that is trained in the social determinants of health, and raise public awareness about the social determinants of health" (CSDH 2008, p. 2). Here, it is clear that achieving health equity is intimately tied to promoting positive social determinants of health for all persons. What, then, is the role of music making and associated practices in promoting health for all?

Social Determinants of Health

The social determinants of health refer broadly to "the structural determinants and conditions of daily life" (CSDH 2008, p. 2) that shape health and well-being outcomes. Paying attention to the social determinants of health requires us to look beyond the "immediate causes" of disease and ill health—such as poor diet and lack of exercise—to understand the "causes of the causes" (CSDH 2008, p. 1153). Current international policy and research shows that the most prolific "causes of the causes" of poor health and well-being are associated with structural inequality and social injustice, which in turn produces and reproduces pervasive health inequality.

Many existing models of the social determinants of health distinguish between macro-level societal determinants that affect all peoples in a

society—for example the natural environment, the governance system, dominant ideologies and historical trauma, such as colonisation, war and conflict—through to meso- and micro-level determinants that may affect only some neighbourhoods or groups, such as the built environment, housing quality, public transport, social networks, services and personal coping mechanisms (see e.g. Carson et al. 2007; Schulz and Northridge 2004). Broad macro-level social determinants of health that affect all peoples in a society are often referred to in health promotion circles as "upstream" determinants, while those that are more proximal or specific to the people experiencing health inequality are referred to as "downstream" determinants (see Gehlert et al. 2008; Williams et al. 2008). Typically, "music, health and well-being" scholarship and research has focused on identifying and amplifying meso- and individual-level health outcomes from music participation such as social inclusion, building social capital, alleviating depression and physical symptoms of disease (see e.g. chapters in MacDonald et al. 2012). In this volume, we have expanded the current view on music and health by bringing together international authors to consider the role of music making for health and well-being across the full continuum of determinants ranging from macro to individual determinants of health. As a result, we explore music making and its associated practices both as social determinants of health and well-being in and of themselves and as activities that may positively shape other social determinants of health.

Our Contributors

The chapters presented in this book provide a range of perspectives on the role of the arts, and of music in particular, in fostering and maintaining health and well-being. The collection originally stemmed from the Queensland Conservatorium Research Centre Griffith University's "Inaugural International Music Health and Wellbeing" Symposium held in April 2015. The symposium's participants collectively explored music participation as both a positive "determinant of health" in and of itself and an activity that can shape and transform other social, environmental and cultural determinants of health. The presentations also looked at

some of the ways in which considerations of health in turn enriched musical practices and opportunities for musicians keen to explore their role in society more broadly. Research presented by leading international and national guests at the Symposium, including Emeritus Professor Grenville Hancox MBE (Canterbury Cantata Trust, UK), Professor Don Stewart (Griffith University), Professor Rineke Smilde (Hanze University of Applied Sciences, Groningen [Prince Claus Conservatoire], Netherlands, and University of Music and Performing Arts in Vienna) and Associate Professor Susan Cox (University of British Colombia, Canada), reinforced the power of musical participation in responding to the social determinants of health across a health promotion continuum ranging from macro-level societal values, assumptions and discrimination through to community and individual-level experiences of chronic disease, social inclusion and hope.

This book has been structured to first engage readers with the idea of music as a social determinant of health and resource for psycho-social well-being. It then progresses along a continuum from micro-level case studies of music activities with small groups towards meso-regional and macro-societal-level applications. In Chap. 2, Donald Stewart and Yoon Irons examine if music can be considered a determinant of health by exploring the evidence gained from medical and clinical interventions that use music. Stewart and Irons see music as being encompassed within a "holistic or socio-ecological" definition of health, which from a population (public health) level promotes well-being through its social participation and community engagement. Stewart and Irons demonstrate the effects of music through two Australian case studies, where qualitative and quantitative data offer insights into how music can increase well-being from a population (public health) perspective. The chapter calls for further investigation into the links between music and health in order to build models that demonstrate the benefits of participation in such a social art form.

In Chap. 3, Jane Davidson and Amanda Krause argue that there are intrinsic links between making music and wellness in a psychological context, discussing the cognitive advantages for those who make music alongside the social and interpersonal benefits of music making. By providing a historical context for social psychology and music, Davidson and

Krause guide us through the benefits of applying a social-psychological approach to music studies. Davidson and Krause call for greater studies of this kind in non-Western and cultural contexts and provide the reader with a considered exploration of the micro- and macro-level determinants in a social-psychological approach to music engagement.

Community musician and researcher, Michael Whelan takes the positive civic engagement perspectives outlined by Hesser and Heinemann in chapter "Achieving Health Equity and Social Justice Through Music: Music as a Global Resource" and applies them in the context of grassroots service delivery with young people with autism. Whelan's personal and professional experience of being a parent and community musician with young people on the autism spectrum provides insight into the value of creative programmes and well-being outcomes. He argues that the potential in shaping positive determinants of health only increases with arts practitioners such as himself engaging in projects together.

Music therapist, Kirstin Robertson-Gillam explores in particular the multi-layered nature of individual and social health outcomes for participants who often experience significant social isolation and exclusion through illness. This case study presents research data on the health and well-being outcomes of a community music therapy intervention for participants with severe depression and anxiety in Sydney, Australia. Much like the previous chapter by Wheelan, Robertson-Gillam's work with therapeutic choirs provides further personal insight into how engaging practitioners in both the health and arts spheres results in improved quality of life for those involved.

Continuing with the theme of how music can be beneficial to older people, Stephen Clift, Rebekah Gilbert and Trish Vella-Burrows approach community singing and its transformative potential by drawing upon their extensive experience in collaborative interdisciplinary research. Their discussion offers a pathway for future large-scale studies of the links between music, health and well-being despite the challenges presented by broader social policy factors.

Naomi Sunderland, Lauren Istvandity, Ali Lakhani and Caroline Lenette analyse the effect music has on asylum seekers and refugees in Brisbane, Australia. The chapter makes a number of suggestions as to

how music and health researchers can adapt existing social determinants of health frameworks for music research with marginalised groups. The authors examine the benefits and drawbacks of using the SDOH model and encourage the adaptation of this model to ensure it is well suited to the programme at hand.

Rineke Smilde next takes a personal look at how music can bring equity to those marginalised by ill health, discussing how people respond to societal change and justice through their professional music practice. The chapter highlights that change is not only felt by the patients but just as much so by the musicians, producing lifelong learning experiences for all participants. This chapter promotes an inclusive approach to music making where young, old, well and unwell all benefit from shared experiences of music participation.

Continuing with case studies which encourage multifaceted participation from a variety of individuals, ethnomusicologist Dan Bendrups, Don Stewart, and leading seventh-generation *wayang kulit dhalang* (puppeteer), Joko Susilo provide a chapter which centres on a project in Indonesia which uses music and puppets to encourage education on sanitation and leading to public health outcomes. Their approach blends traditional Javanese puppetry with musical accompaniment along with the message of positive participation in sanitation to address SDOH outcomes.

Ethnomusicologist, Klisala Harrison offers a further coal-face perspective, that of workers, paid and unpaid, involved in providing access to arts events; either through organising, administering or performing within them. Harrison, who was one of the first ethnomusicologists to use an explicit SDOH lens, highlights the health benefits offered to those that participate in the arts who are unemployed and living in poverty. Arts programmes offer this segment of the population valuable skills and networks which can increase self-esteem and build status within their communities.

Riffing on the theme of empowerment through participation in community arts, the chapter by Brydie-Leigh Bartleet, Naomi Sunderland and Ali Lakhani draws on insights from Indigenous SDOH frameworks from both Canada and Australia in order to focus on two key social determinants in relation to case studies from the *Living Cultures* project and

the *Desert Harmony Festival* run by Barkly Regional Arts in Central Australia. These two determinants are a connection within community and lifelong learning and are explored in this chapter via various sub-theme determinants, including employment, language, heritage, strong cultural identity and cross-cultural connections between Indigenous and non-Indigenous peoples.

Broadening out to explore how music and arts-based intervention with respect to health concerns can inform policy, education and practice, Barbara Hesser and Harry Heinemann's chapter provides a global perspective on how creative intervention, including that of music, can be a contributor to achieving high-level population well-being goals, such as those determined by the World Health Organization. Hesser and Heinemann demonstrate that reaching out to major international organisations builds awareness of music's potential in addressing critical world issues.

Benjamin D. Koen continues to widen the lens exploring how medical ethnomusicology is concerned with how the arts can engage in health, healing and striving towards equity. Koen provides a detailed explanation of terminology and approach in the field, alongside cultural factors which need to be considered in order to adequately explore the way in which music can provide a pathway to healing and well-being. Koen concludes with a significant call for mobilisation in considering the intersection of music and health in Public Health Initiatives leading to the experience of music and health for all.

Our book reaches its crescendo with a contribution from the Director of the UK's longest established Arts Health Unity at Manchester Metropolitan University and a leading authority on the arts and health in the UK, Clive Parkinson. Parkinson takes us on a realist's rumination on how social justice and health equity have been used by politicians to sell specific agendas. Parkinson discusses the different media forms which art can take, their historical and applied context in a health setting, painting a picture of not only the political agendas that can shape the arts but the arts in shaping public policy specifically in this context—through music. Interweaving lyrics, poetry and history, Parkinson demonstrates that music and health are a global drum which has been and will continue to beat into the future.

Conclusion

Each chapter of *Music, Health, and Wellbeing* offers a different context for analysing music and health through the lenses of social justice and health equity. Together the chapters show not just a way in which music can be experienced from a well-being perspective but how music can inform perspectives on health equity and social justice.

Collectively, the chapters in this volume demonstrate how music and the arts more generally can assist in addressing some of the most pressing social issues of our time. The international perspectives show not only how globally pervasive music and health interventions are but also how policymakers and health workers are increasingly turning to the arts for accessible, comparatively affordable and socially engaged ways to inform their practice. They too show how musicians are responding to this call by deepening and reflecting on their practices with new insights and understandings.

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Music, Public Health, and Health Promotion: Can Music Be a Social Determinant of Health?

Donald E. Stewart and J. Yoon Irons

Introduction

The benefits of music making on the broad range of health and well-being determinants have long been recognised. About a century ago, for example, in a paper on 'Music and Health', Miss Eva Vescelius quoted the London Lancet of November 3, 1888, which reported that:

> Music cannot be named along with many drugs in point of apparent accuracy of result. Its place is not in any ordinary catalogue or pharmacopoeia; it belongs rather to that group of natural recreative forces which are acting in every healthy life and which operate against the morbid weakness of any part by increasing the vigour of the whole. (Vescelius 1918, p. 379)

She went on to discuss the role of music in the treatment of disease over the centuries, from the time when David took his harp and played before Saul, to the father of medical science, Galen's recommendation to play the flute upon the suffering parts of the body; to Gallius (also

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flute—soft gentle strains for the cure of epilepsy and sciatic gout); to Asclepiades (100BC) who recommended music for disorders of the ear; to Plato, Cicero, Aristotle, Pythagoras, Milton, and Rousseau. She concluded that: 'When the therapeutic value of music is understood and appreciated, it will be considered as necessary in the treatment of disease as air, water and food' (Vescelius 1918, p. 376).

Over the last three decades, we have seen increasing confirmation of the importance of music to promote health. The World Health Organization (WHO) (1946/2006) broadly conceptualises health as a 'state of complete physical, mental and social well-being and not merely the absence of disease or infirmity' (p. 1). Music also relates to the additional spiritual dimension of health and well-being. Whilst the benefits of music making to health and well-being appear, by and large, to be accepted, there is continuing debate about how this takes place. A number of researchers have started to look at the 'how' question from a range of perspectives, drawing from both clinical and social disciplines.

At the clinical level, for example, a review of the academic literature on the neurochemistry of music (Chanda and Levitin 2013, p. 179) examined the scientific evidence supporting claims that music influences health through neurochemical changes relating to reward, motivation, and pleasure; stress and arousal; immunity; and social affiliation. These domains parallel the known neurochemical systems of dopamine and opioids, cortisol, serotonin, and oxytocin. Whilst scientific inquiry into the neurochemical effects of music is relatively recent, the authors comment that after reviewing about 400 articles, the reviewed evidence does provide preliminary support for the claim that neurochemical changes mediate the influence of music on health (Chanda and Levitin 2013).

At the population or public health level, *social affiliation* is recognised to have significant impact on our mental and physical health (Berkman et al. 2000, p. 843). Taking part in performing arts, in particular singing in a choir and dancing with a group of people, is associated with both increased social affiliation and health (Kreutz and Murcia 2012; Kreutz 2014). Thus, the focus of this chapter is the contribution of music to the nature of societal and individual well-being and the 'good life'.

The Social Determinants of Health

The Final Report of the WHO's Commission on Social Determinants comments that: 'Together, the structural determinants and conditions of daily life constitute the social determinants of health and are responsible for a major part of health inequities between and within countries' (2008, p. 1). They have been described as 'the conditions in which people are born, grow, live, work and age. These circumstances are shaped by the distribution of money, power and resources at global, national and local levels' (WHO 2017, p. 1). A social determinant of health approach acknowledges a role for individual action, but also recognises that the individuals' choices are strongly influenced by their social circumstances over the life course and that positive or negative effects of these social determinants accumulate across the life course. The social determinants of health have been identified as the single most important determinant of good or ill-health by a number of authors (Marmot and Wilkinson 2006), although they have been characterised as 'foundational determinants' or background determinants that influence other health determinants, or as they have been called, the 'causes of the causes' of good or ill-health (Australian Institute of Health and Welfare 2016, p. 1).

A holistic or socioecological definition of health directs our attention to the social, psychological, and environmental factors that impinge upon our health status and also to the contribution of these factors over the life course. Building and preserving good health goes beyond the provision of health services and the prevention of specific diseases, and we are reminded that policies pursued by many branches of government and by the private sector, both nationally and locally, exert a powerful influence on health. This broader definition of health and well-being means that when issues of health status are discussed, these discussions are often influenced by contextual issues affecting health outcomes, such as environmental conditions, housing, education, transport, employment, income, in addition to access to healthcare services. Thus, various 'non-health' determinants come into play when considering the health of individuals and groups and the lifetime contribution of such determinants to health and well-being.

The contextual or ecological issues outlined above have been represented in many models as underlying conditions or contributory factors which interact and become apparent as ill-health, disease, and injury. They have been considered as the submerged aspects of the 'health iceberg' (Travis and Ryan 2004, p. xxi), having a major influence upon people's health and well-being prior to specific illnesses, diseases, or disabilities becoming evident. More recently, these social determinants of health have been seen as operating both at an individual and a population level and reflecting our values, attitudes, beliefs, resources, skills, and knowledge; as well as the resources, opportunities, culture, and settings in which we live. Consideration of these psycho-social-cultural determinants gives us the opportunity to research and establish the links between music, health, and well-being.

Well-being has been described by Marmot as a multidimensional construct, which includes satisfaction with life, a sense of autonomy, control and self-realisation, and the absence of depression and loneliness (Marmot 2011, p. 42). Such a description is critical to an understanding of the links between music, health, and well-being. Given the multiple determinants of health and the significance of well-being in any definition of health, we are justified in concluding that music and related activities have an important role to play in the health of our nation. However, cultural activities and artefacts are often neglected aspects of the non-health determinants and should be added as contributors to the determinants of health status.

Economic growth in Australia and other developed countries since World War II has resulted in higher standards of living and generally improved health and life expectancy. For example, from 1990 to 2010 there was an increase in life expectancy in Australia at birth of 5.4 years for males and 3.8 years for females. Australians moved from the 11th highest life expectancy in 1990 to 4th highest in 2010, among 35 member countries of Organisation for Economic Co-operation and Development (OECD). Moreover, in international comparisons, Australians over the past 60 years have tended to report quite high levels of happiness and life satisfaction. However, these population figures hide the impact of socioeconomic differences and increased social inequality,

as well as the effects of remoteness. Often associated with remoteness, Indigenous Australians have not shared these health gains. For example, a recent State government report 'The Health of Queenslanders 2014' reports that:

> Indigenous Queenslanders carry a greater burden of ill-health and early death than non-Indigenous Queenslanders. … This is evident in the life expectancy gap—a 10.8 year difference between Indigenous Queenslander males and all non-Indigenous males in 2010–12 and for females an 8.6 year gap. (Queensland Health 2014, p. 154)

As Marmot and others have demonstrated, a critical feature of the distribution of the burden of disease is social inequality. His work among various grades of British civil servants (the 'Whitehall Studies') has been particularly significant with the initial Whitehall study finding a higher prevalence of significant risk factors amongst lower civil service grades (Marmot et al. 1978). The studies indicate that there is a social gradient in health that is not only related to poverty but also related to where people are in the hierarchy (Marmot et al. 1991). Marmot and his group argue that the reason for this gradient was control of destiny and that stress related to lower levels of control over one's life is associated with substantially poorer health and higher death rates (Australian Broadcasting Commission 2017).

The identification of control of destiny as a critical health determinant underlines the significance of culture to health and well-being. This has been presented as a foundation for understanding the health of Indigenous Australians. For example, the Lowitja Institute Aboriginal and Torres Strait Islander Health Cooperative Research Centres (CRC), which commenced operations in July 2014, set out its perspective on culture and health with a prefacing comment to its Background Paper:

> 'Cultural wounds require cultural medicine'. The Paper goes on to state that 'culture as a determinant of health remains unexplored in public health research and that this limited use of culture as a health resource, rather than as a barrier to health, reflects the dominant deficit model of public health inquiry. (Lowitja Institute 2015, p. 1)

In a brief but important working definition, the Paper describes culture as being 'about the life-giving values from which individuals, families and communities can draw strength, resilience and empowerment, thus contributing to health and well-being' (Lowitja Institute 2015, p. 2).

This paradigm of health, that places culture at its core, gives us an alternative vantage point to think about health and well-being and what the determinants might be. We can look at well-being as something that is determined by a complex interplay of risk and protective factors derived from the combination of environments, internal dispositions, and life experiences to which people are exposed. These factors, some of which are innate and some that are acquired or learned through informal and formal health education, accrue to build our repertoire of coping resources or our 'human capital'. At a broader level, strong social relationships and a sense of connectedness and participation in communities have been shown to have a profound impact on health, and consistent evidence indicates that a sense of connectedness is protective of mental and emotional well-being. The concept of 'social capital' directs our attention towards the important social relationships which go to shape our health and well-being in a community.

Music, Public Health, and Health Promotion

What has been called 'the new public health' has emerged in recent decades to meet a new set of chronic diseases—those associated with increasing longevity and overpopulation, industrialisation and industrial decline, inequalities in health in affluent societies, environmental damage, and ecological imbalance. The notion of connectedness between human beings, their physical and social environment, and their health, has emerged as an important feature of health promotion and the building and strengthening of human capital, social capital, and, to a lesser extent, cultural capital. Participation in community activities is recognised as a protective factor in relation to health outcomes. However, there has been relatively little music and health promotion research in Australia regarding the effects of group music making on positive health outcomes.

A Study of Choral Singing in South-East Queensland (2007)

Australian data from an international study (with the UK and Germany: 21 choirs, 1124 choristers) give us some insights, particularly into the effects of singing in choirs on quality of life, amongst participants in South-East (SE) Queensland (Clift et al. 2008, 2010). This study sits within the 'new public health' perspective, recognises the social determinants of health, and uses a broad definition of health.

Many studies have shown that singers report a wide range of social, psychological, spiritual, and health benefits associated with singing, and in this study we hypothesised that choral singing has a positive effect on a number of important dimensions of the choristers' quality of life. The Australian component of the study used a mixed methods approach (both quantitative and qualitative) and 240 individuals with at least one year of choral singing experience were invited to participate with 166 responding to the survey, a response rate of 69.1%.

This was a convenience sample and participants, aged 18–90 years old, were drawn from five choirs/choral societies in SE Queensland. Four of the choirs required auditions for membership and one was a non-auditioned community choir. The mean age was just over 52 years old: a third were men and two thirds women. Nearly 70% had postgraduate qualifications. Just over a third were employed full time, about a third employed part time, and 27% were retired. Just under two thirds were married. About half participated in religious activities. Nearly half of the sample (49.1%) were senior choristers with over 20 years of choral singing experience.

Data were collected by self-administered questionnaires using the 'Effects of Choral Singing' questionnaire and the World Health Organization Quality of Life (WHOQOL-BREF), which measures physical, psychological, social, and environmental health and well-being. Detailed statistical analysis has been published elsewhere (Lee et al. 2017), but the researchers concluded that the results from a series of stepwise hierarchical regression models show that:

> Choral singing benefited the choir members' physical ($p < 0.05$) and psychological health and well-being ($p < 0.01$) through social engagement and

> a sense of positive identity ($p < 0.05$). Choral singing also impacted on social health and wellbeing positively through feeling excitement and importance to life ($p < 0.01$), as well as longer duration of involvement in the choir ($p < 0.05$), after adjusting for the effects from socio-demographic variables in the models. (2017, forthcoming)

The findings of this study supported the study hypothesis that choral singing is associated with enhanced health and well-being, in particular with the physical, psychological, and social dimensions of well-being. The choristers considered that they received major positive and beneficial effects from their choir activity. This included a sense of social engagement, a perception of positive identity as choir members, and feelings of excitement at being involved in group singing. It gave them a sense of importance, engagement, and involvement in something bigger than 'just themselves'. Despite 51% of choristers reporting long-term health problem(s), 98% rated their quality of life as 'good or excellent' and 81% were 'satisfied or very satisfied' with their health.

The study is of course limited in that it was a convenience sample drawn from the SE (urban) corner of Queensland and was not randomised. Also, the choirs involved tended to focus on the classical repertoire—undoubtedly reflected in the demographic profile. No generalisations can be made to other locations or groups.

The qualitative comments provide additional insight. Eight main dimensions were identified, as listed below with selected illustrative quotations, all of which tend to reflect the social, psychological, and spiritual aspects of participating in choral singing:

1. *Offers social support and reduces the feeling of loneliness.*
   'When I first moved to Brisbane from the US I was very homesick and didn't know anyone. As a result of joining the choir, I had a social outlet and I found singing to be very therapeutic.'
2. *Spiritually uplifting, as it enhances the mood and energises the spirit.*
   'I describe rehearsal as my "mid-week therapy". I could have a truly terrible day and come to rehearsal in a bad mood, but by the time I go home, I feel energised and calm.'

3. *Builds confidence and provides a feeling of self-respect, self-esteem, and security.*
   'Being in a choir has provided security and self-respect that has often been missing in other areas of my life at various stages.'
4. *Offers a feeling of satisfaction and a sense of achievement.*
   'It washes away the grime of routine and allows me to participate in a communal creation of something beautiful.'
5. *Offers relaxation, which reduces stress and anxiety.*
   'Helps with stress management and provides social contact—only outlet I have. Acceptance (uncritical) of me as a person has been vital for my well-being and making me who I am.'
6. *Enhances intellectual well-being.*
   'Increase in mental agility and memory.'
7. *Offers a personal interest outside of one's work and home life.*
   'Gives me something that's just mine outside home and work life.'
8. *Encourages discipline and learning.*
   'It disciplines me, makes me work as part of a team and makes me take responsibility for learning the music in different ways.'

Raising mood and relieving stress were amongst the most frequently mentioned psychological benefits of singing. Also, respondents often reported many psychological motivators which helped them to reach these positive psychological states, including high self-esteem and self-confidence as well as providing a sense of spiritual uplift gained from energising the spirit and enhancing the intellectual well-being. The comments made by choristers emphasised how choral singing resulted in improving their quality of life by providing a relaxed and calm environment where all could enjoy a sense of unity and friendship.

Findings from this study suggest that choral singing plays a very important role in psychological health as a component of the quality of life and also has benefits for emotional well-being. It is reasonable to argue that singing plays an important part in maintaining a positive perception of stable physical health. It clearly has a role as a determinant of health for these participants.

'HYPE' A Study of 'Street Dance' (Music and Movement)

The second study was amongst a very different population in a different location—but where music played just as central a role in people's lives. This project was originally funded (2007) through Logan City Council, Queensland Health and Griffith University, to work with young people through 'street dance'. The Project was titled 'HYPE (Hip-Hop = Healthy)' to align with the obvious popularity of the urban music culture amongst Logan youth. The project objective was to develop a comprehensive physical activity programme using street dance to increase physical activity levels and contribute to building connectedness and feelings of self-worth amongst the Logan youth community.

The plan was to utilise street dance to inspire Logan's culturally mixed and generally relatively lower socioeconomic status 13–17 year old population to be more physically active and to contribute to improving social and emotional well-being. We aimed to:

- promote self-esteem and social competence
- increase physical activity amongst young people
- integrate diverse ethnic groups into dance
- celebrate youth culture in Logan

Community consultation in Logan in 2005 provided feedback from the young people consulted that there were few local physical activity opportunities available to them. In particular, there were limited opportunities for young people in Logan that combine dance/physical activity, music, and celebration of youth culture. One activity that was identified as extremely popular amongst both males and females was hip-hop dancing. As a result, high school students were invited (5 schools in 2007; 9 in 2008, 15 in 2009) to participate in dance (hip-hop) classes as an after school activity over 12 weeks, during term three, with a view to competing at a public venue (the Griffith University Logan campus) for the best hip-hop routine. The group size ranged from 20 to 40.

Each school was visited at Assembly by a 'cool' instructor explaining the nature of the project, requirements, and proposed outcomes. Dance

instructors illustrated what they would be learning and student motivation was built. At the end of the classes, we held a 'signature event' where teams from the schools involved in the project gave a public performance/competition demonstrating their skills and allowing their families and other schools to appreciate their creativity and how talented they were.

A qualitative, cross-sectional study design was used to examine participants' perceptions about the impact of the programme on their well-being. Survey data were gathered regarding the impact of the programme on participants' physical, psychological, and social well-being. We found that the vast majority of participants reported that HYPE was a positive experience and felt it offered a valuable opportunity to engage both with their peers and with the broader community (Harris et al. 2012, p. 239). Perhaps one of the most important but largely unanticipated outcomes of this project was that the 'street dance' focus promoted meaningful involvement and engagement amongst students, many of whom are substantially alienated from formal educational activities. The Logan schools involved typically have relatively low educational achievement levels and similarly low levels of students continuing to tertiary education. Connectedness to meaningful school-based activities has been shown to provide a wide range of both physical and social-emotional benefits. These often act as protective factors and, in an environment where success is hard won and relatively infrequent, HYPE and engagement with members of a dance team, brings out some of the best features of resilience. Most people (when prompted) will mention as key elements of a good life things like happy relationships, a sense of belonging and being valued, and of feeling competent and skilled. Many of these young people were from disadvantaged backgrounds, but our evaluation of participation in the HYPE project revealed a sense of pride and self-esteem that can be nurtured and built.

Music offers ownership and engagement, and this project illustrated the huge benefits that can accrue to the individuals and groups involved in a music/dance project. Increased self-esteem, the development of new skills, and increased connectedness both within the school and between the participants and the wider community were very apparent and the sense of empowerment, particularly at the 'dance-off' signature event, was palpable.

Conclusion

Although much of the research and policy development relating to the impact of the social determinants of health has centred around differences in socioeconomic position, occupation, income, housing, education, and residential environment, for example, we are in the early stages of understanding the complex way that music works within the psycho-social-cultural field to influence people's health and well-being. Rapid social change and its impact on individual and community well-being provide many fertile opportunities for innovative research in the music–health space. Music is an invisible thread that weaves between the social determinants of health and relates the individual through culture and social affiliation to protective factors relating to health. This is an opportunity for connections to be made between health, well-being, and our cultural life—connections that, as the Lowitja Centre remind us, have been part of Indigenous Australians' lives for millennia. The current emphasis on the social determinants of health, if defined to include the cultural sphere, offers a clear pathway forward for research on music and health. Such an approach comes at a time when we are increasingly looking to prevent high-cost health expenditure and promote ways to make people feel valued, engaged, connected, and empowered.

The increasing emphasis on the social determinants of health provides an opening to explore some fundamental questions about the role of music in our lives and the extent to which our health and well-being can be affected by it. In research terms, there are many qualitative studies that have described the wide range of social, psychological, spiritual, and health benefits associated with music making and that such benefits reach across the whole of the lifespan and with people of diverse social backgrounds and health status. These emotional, social, and cognitive benefits may well be powerful protective factors working to enhance health, particularly relating to reducing stress and promoting a sense of well-being and happiness.

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Social and Applied Psychological Explorations of Music, Health and Well-Being

Jane W. Davidson and Amanda E. Krause

Introduction

The successes of modern Western healthcare have included extended life expectancy and reduced illness and disease. Along with these gains, we increasingly search for interventions to facilitate people's quality of life in terms of both individual and group senses of wellness, satisfaction and contentment (www.mindhealthconnect.org.au/wellbeing). In other words, well-being is a strongly desired outcome for modern everyday life. As the introduction to this volume indicates, engagement in music (via listening and playing) has been found to have a positive role to play in everyday well-being. Music listening accompanies us through our everyday activities, owing to the ever-sophisticated technologies at our fingertips. As this chapter will reveal, in Western contexts, we often regulate our moods listening to music with different types of music satisfying different needs. Additionally, making music exerts considerable demands

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on the human central nervous system as it interactively engages memory and motor skills. Even when well embedded in memory and automated—for example in someone who has a piece well learned—the activity of performing music engages significant cognitive load, requiring ongoing active decision-making and fine mental and motor adjustments. Evidence also points towards these very demands having positive effects on brain plasticity, with musicians possessing more pronounced mental flexibility among those engaged in skilled activities (Altenmüller and Gruhn 2002; Altenmüller et al. 1997; Schellenberg 2004).

As suggested above, there are cognitive advantages for those who make music, but as a medium that typically has a strong social component, musical activity requires interpersonal interaction and aural and visual feedback to monitor and respond to unfurling music-specific and collaborative social cues from co-performers and/or audiences (Davidson and Broughton 2016). It seems that these interactions have further positive impact with the development of micro-social cue sensitivity as a vital part of music making. Cognitive enhancement and social skills can be developed at any time across the lifespan and, since music demands these intellectual and collaborative behaviours, it is particularly effective in accessing elements that help people feel in control, socially included and consequently experience positive well-being outcomes (see Davidson 2011).

The current chapter explores the specific well-being benefits that diverse forms of musical engagement can promote from the particular perspective of the social and applied psychology of music. Broadly speaking, this research has included explorations of the musical materials employed, the emotions evoked, the mode of presentation and the social context of the music. The disciplinary approach is predominantly evidence-based, addressing empirical questions (Skingley et al. 2011).

Historical Context

The first social psychologist of music to contribute to the field was Paul Farnsworth (1899–1978), with the text *The Social Psychology of Music* (Farnsworth 1958, 1969). Farnsworth was a radical behaviourist whose accomplishments in the psychology of music at Stanford were trailblazing.

He researched the historical and philosophical underpinnings of the various schools of psychology in his acclaimed publication with sociologist Richard LaPiere, *Social Psychology* (LaPiere and Farnsworth 1949).

Why begin with a reminder of investigative beginnings? In part to show that the modern discipline of psychology has been interested in the systematic study of music as a behaviour leading to social benefit for over 60 years. Also, to highlight that Farnsworth's early investigations explored music's potential for: expressing characteristics of the individual in society; reflecting and generating the processes of socialisation; and aiding with social adjustment and social interaction. The words 'health' and 'well-being' are not part of his discourse, but it is clear that music was explored as a tool for social facilitation and, in this way, was evaluated in terms of its contribution to social well-being. The research explored in the current chapter includes studies which have similar social and applied psychological agendas, their explicit intention being to study music and its role in a social context. Whether or not a specific intention of well-being benefits was a part of the research design in the cases explored, both health and well-being outcomes were nonetheless realised.

Continuing with the history of Farnsworth's studies in the 1940s and 1950s, it is vitally important to realise that his work was radically different from equivalent studies in the main field of psychology that were focused on an individual's perception and cognition and did not consider social and cultural impact on these capacities (North and Hargreaves 2008). In his texts, Farnsworth stressed what he believed to be the misguided nature of much of the psychological enquiry: that it focused on only what happened in the brain, usually explored in a sequence from sensation to thought and action. In other words, the role of social interaction was ignored in terms of how thought and perception were shaped. The orientation of Farnsworth's ideology is found in the introduction to the third edition of the textbook, *Social Psychology*, that 'the behavior of man [sic.] is largely a product of the behavior of other men [sic.], known collectively and abstractly as "society"' (LaPiere and Farnsworth 1949, p. 5).

After Farnsworth, the interest in social-psychological and applied aspects of music was relatively slow to emerge, with social psychologists tending to investigate theories that accounted for cultural practices, often manipulating a task experimentally to investigate its social impact. In

fact, the direct investigation of health benefits of musical engagement has been the principal focus of the discipline of music therapy. Music therapy has had a strong emphasis on the medical model of treatment, much of which has emerged from the discipline's roots in hospital settings—for example, being part of a multidisciplinary team treating a specific condition for functional health gain such as physical function improvement after stroke or mood regulation for bipolar disorder (Bunt 1994). But, it is important to acknowledge a strand of therapeutic practice and theory that emerged in Scandinavia that is now recognised as Community Music Therapy (Pavlicevic and Ansdell 2004), because it is typically focused within real-world community context, and has social interaction—'communitas'—at its core. An example of such music therapy might be work in a community choir or with a school class. This approach has as its distinguishing features that trained music therapists work as facilitators of social processes using music as the tool to direct the interpersonal and group relationships.

Music therapy is not the disciplinary focus of this chapter, but it is essential to acknowledge the powerful role music therapists have had in emphasising the role of the social context of music making in terms of the promotion of health and well-being. Those interested in this specific field are recommended to explore the work of Brynjulf Stige (e.g., Ansdell and Stige 2016; Rolvsjord and Stige 2013), and also Gary Ansdell (e.g., Ansdell 2014; Pavlicevic and Ansdell 2004).

After Farnsworth, the next significant psychology text on music and its social function came along some 60 years later, with Adrian North and David Hargreaves' (2008) *The Social and Applied Psychology of Music*. Their text maps areas of concern similar to those pursued by Farnsworth, but represents the burgeoning interest in the field that developed in the late 1990s. Reflecting theoretical refinements in psychological enquiries more generally, North and Hargreaves organised their discussions aligned to Willem Doise's (1986) intraindividual, interindividual, sociopositional and ideological frameworks that consider increasingly broad concepts and applications, reflecting the current volume's interest in micro- to macro-practical and theoretical accounts of music. Again, while North and Hargreaves did not promote a specific health and well-being perspective, they nonetheless addressed topics such as identity, listening

and performance behaviours, presenting research findings with implications for health and well-being benefits.

Given that all of the authors mentioned thus far have come from Western cultures and research paradigms, it is evident that the work undertaken in the field of social and applied psychology of music has been within Western societies, and, more specifically, with those of Caucasian European backgrounds. So inevitably, particular social practices form the evidence-base of the current chapter. This is problematic as there are other cultures where arts practices are strongly integrated into everyday life and whose roots are very clearly articulated as being of central importance to personal and cultural health (e.g., the Venda of Limpopo, South Africa—Emberly 2012). But, again, this is outside of the scope of the current chapter.

The current chapter presents a survey of recent social-psychological literature broadly, and the authors also draw from their own research offering case studies to highlight evidence of health and well-being benefits when applying a social-psychological approach to music studies. The chapter is constructed in three parts: the effects of listening to music; making music; and a final section which discusses theories that show promising application for future research that addresses health and well-being from a social and applied music psychology perspective. In each section, micro to meso levels are embraced, working through examples of studies that adopt intraindividual perspectives to those that realise inter-individual positive outcomes.

Social-Psychological Research on Music Listening and Its Relationship to Well-Being

Can Musical Preferences Influence Social Behaviour and Impact Well-Being?

One of the larger studies published exploring music and social behaviour was undertaken by North (2010). In it, 36,000 people in more than 60 countries were surveyed, aiming to uncover the relationship between personality and musical preference. Clear results were obtained:

Blues fans displayed high self-esteem, were creative, outgoing, gentle and at ease; Jazz fans had high self-esteem, were also creative, outgoing and at ease; Classical music fans showed high self-esteem, were creative, introverted and at ease; Rap fans had high self-esteem and were outgoing; Opera fans had high self-esteem, were creative and gentle; Country and Western fans were hardworking and outgoing; Reggae fans had high self-esteem, were creative, were not hardworking, but were outgoing, gentle and at ease; Dance fans were creative and outgoing, but not gentle; Indie fans had low self-esteem, were creative, not hardworking and not gentle; Bollywood fans were creative and outgoing; Rock/ Heavy metal fans had low self-esteem, were creative, not hardworking, not outgoing, gentle and at ease; Chart Pop fans had high self-esteem, were hardworking, outgoing and gentle, but not creative and not at ease; and Soul fans had high self-esteem, were creative, outgoing, gentle and at ease.

What can we say about North's findings in terms of the theme of the current volume? That specific music attracts specific types of people? These findings offer a snapshot of the cohorts studied at a specific point in time and do not speak to causation, that is, the factors that are influencing these results. A preference for certain musical genres may have resulted from exposure to specific social environments. Also, people with particular personality traits may have predispositions to certain states and may be attracted to music that expresses their view of the world or their personal feelings in relation to beliefs and social situations (see Davidson and Garrido 2014).

One explanation of musical preference is Drive Reduction Theory, which proposes that we seek homeostasis so that when tension is present as a result of behaviour like aggression or grief, the person releases emotions in order to re-establish a state of balance. Accordingly, it has been argued that music listening can allow for the release of negative emotions in a harmless way, perhaps preventing that person from expressing these emotions through other potentially less socially acceptable means (Berkowitz 1962). It is possible that music such as rap and metal, which are often referred to as 'problem music' (North and Hargreaves 2006) may actually have a beneficial effect, allowing a cathartic release of psychological tension (Davidson and Garrido 2014).

Social Learning Theory, however, suggests that modelled behaviour or ways of thinking can encourage specific forms of behaviour that can be manifest at the small-scale, individual or mass-societal scale (Bandura et al. 1961). According to this theory, exposure to positive or negative emotions through various media can induce the emotions and/or encourage the behaviour seen.

Drive Reduction and Social Learning theories are both supported by logical arguments and help us to explain a relationship between personality and musical preference and also offer frameworks for how observed behaviours might become applied in 'treatment' conditions to assist well-being outcomes. Schäfer et al. (2013) identified three underlying dimensions for listening to music. The first, as an expression of social relatedness (e.g., musical listening might operate as a function of social group allegiance and self-identity) is clearly shown in the example of the musical preference research cited above. The second reason is to achieve self-awareness (e.g., listening helps when thinking about who you are and want to be); again this relates to preference and sense of identity. But the third, to regulate mood (e.g., listening to help relax or get into a more positive mood), is the most often cited reason for listening to music (Lonsdale and North 2011). It is possible to see applied potential in research such as North's work on musical preference and personality. For example, an association has been found between clinical depression and mood disorders and the preference for certain genres including heavy metal and techno (Doak 2003). So, if preference for heavy metal music is, as North found, correlated with over-sensitivity, moodiness, pessimism, discontentment, indifference to the feelings of others and even aggressiveness (Wells and Hakanen 1991), it might be that other genres of music can be used to help shift the mood state of someone experiencing negative emotional states after listening to heavy metal music.

Mood Management

At a macro level, happiness is often correlated with life satisfaction, and in combination these two factors are reported as the chief components of subjective well-being (Diener et al. 2009). In line with this relationship

between happiness and positive well-being, 'mood management theory' by Silvia Knobloch and Dolf Zillmann (2002) argues that Westerners' media consumption is based on a generic goal to reduce bad moods (anxiety and depression) and increase good moods (to be happy and positive). In the specific case of music, this theory suggests that people will prefer music that is going to make them happier, and also implies the potential for positive 'self-medication' using music.

William Thompson et al. (2001) carried out systematic listening studies to find that enjoyment ratings increased for music noted to represent happiness—fast classical music in a major key—when compared to a slow piece in a minor key. Even when listeners heard different versions of the same piece, but that was varied in tempo and key, liking ratings were still the highest for the happier sounding versions in fast tempos and major keys (Husain et al. 2002).

Further to this, different socio-economic groupings and generations report slightly different psychological benefits of listening to music. But, interestingly, upbeat and happy mood are not the only moods reported. Suvi Saarikallio and Jaako Erkkila (2007), for example, found that adolescents regulated their moods for the following effects: Entertainment (to enhance or maintain a happy mood), but also Revival (to relax or be rejuvenated), Mental Work (mental contemplation and reappraisal of emotions), Discharge (release and venting), Diversion (distraction from worries), Solace (to obtain comfort, support and emotional validation), and Strong Sensation (to induce intense emotion experiences). These different reports of music's uses have been captured in 'optimal stimulation theory' (Zentall and Zentall 1983), which states that there is an ideal level of arousal that produces the most comfortable and productive outcomes for each person that is dependent on more enduring traits like personality and also how much arousal is experienced when listening. Accordingly, a person in a high state of arousal would use slower music to lower their state of arousal in order to help them feel calmer and more relaxed. Investigating variation in mood-related uses of music, Sandra Garrido and Emery Schubert (2011) found that arousing music was used while carrying out mundane activities like waiting; or to improving concentration when tired. To calm down, people would generally listen to slower, simpler structured music.

However, to elaborate, there is evidence from research concerning everyday listening which suggests that arousal optimisation does not necessarily involve moderating from high to low (or low to high) arousal. Rather, music selections may be relative to a listener's arousal-based goals (Krause and North 2014). For instance, people prefer high-arousal music for aerobic exercise and low-arousal music for relaxation (Hargreaves and North 2010; North and Hargreaves 1996, 2000). In this way, people prefer music that matches their activity with regard to arousal level, and recent research concerning music playlists reiterates that finding (Krause and North 2014). This is evident with regard to specific mood-related uses of music too; as Garrido (2017) discussed, there are times when people seem to 'wallow' and 'enjoy having a good cry' (to paraphrase a sentiment she found reported across a range of different music listeners). Psychological theories can also help to explain this kind of behaviour. For example, a modified mood management theory suggests that humans will delay immediate gratification in order to enjoy more complex benefits such as being able to build up and then release negative emotions through a process of catharsis (Larsen 2000).

Garrido (2017) reported one participant who described obsessively listening to music that made him feel both romantic and melancholic at once. Other studies have additionally found that depressed individuals disliked energetic music (Punkanen et al. 2011). People with depression are reported as having a reduced capacity to regulate their moods successfully. They frequently engage in behaviour such as rumination, which is likely to extend the duration of sad feelings and they have low motivation to do things that would improve their mood (Forbes and Dahl 2005).

Garrido and Schubert (2015) asked participants to choose pieces of music that made them sad and happy then listen to them reporting on the outcome. Results revealed that depression and general mood disturbance levels rose for *all* participants when listening to sad music. But those who tended to have the lowest initial mood levels, experienced greatest mood improvements after listening to happy music. This would suggest that listening to sad music is not a useful or 'healthy' strategy for managing sad moods for people with depression. However, for those experiencing typically moderated mood, music can help.

Garrido and Schubert (2013) also explored the relationship between the enjoyment of music evoking negative emotions and certain personality traits such as absorption, empathy and rumination. An online survey including the Like Sad Music Scale (LSMS) designed by Garrido revealed high scores in absorption (total immersion) were correlated with the enjoyment of strong emotions in connection with sad music. The findings suggest that people displaying absorption are capable of disconnecting from the unhappiness typically experienced with negative emotions. In other words, they could 'enjoy' feeling sad listening to music without experiencing the negative emotions they would have with a real life incident.

In sum, the research on music and mood management cited above suggests that there are several interacting factors in how people are affected by music. Overarchingly, even complex phenomena like enjoying a good cry to music can have positive well-being outcomes, but these phenomena are complex with a number of factors including personality operating.

Music Listening, Technology and Self—And Other—Regulation

Referring back to the three functions of music listening, rapidly changing technologies allow us to experience music of any sort, in any place, at any time. Recent social-psychological scholarship has begun to consider the devices used and how music is selected to listen to in everyday contexts (Krause and North 2017a; Krause et al. 2014, 2015, 2016b). Clearly this has implications for how we engage with music, especially potential for emotion regulation. Digital and internet technology enables people to more actively choose how they encounter music (Krause and North 2016). For instance, as the years pass, people increasingly create their own playlists (e.g., Heye and Lamont 2010) and streaming services have altered people's relationships with music via ownership/access (Mäntymäki and Islam 2015; Sinclair and Green 2016).

One systematic way to investigate individual music use habits has been the 'Experience Sampling Method' (Sloboda et al. 2001; see also Greasley

and Lamont 2011; Krause et al. 2015; Juslin et al. 2008; North et al. 2004). Its methodological advantage is that it is naturalistic: participants carry out their everyday activities and throughout the day they receive messages to answer questions about their musical activities as they move around in their daily routine. Moreover, an advantage is that it typically exploits the everyday tools used for music listening (e.g., mobile phones). Using the Experience Sampling Method, Amanda Krause and colleagues (Krause et al. 2014, 2015, 2016b) explored how listening devices (e.g., stereo, mobile phone, radio) and methods used for selecting the music (e.g., playlist, shuffle, specific choice) influenced the listeners' experience of that music.

The study sampled 177 residents of the UK, with just over 40% being university students (mean age of 32 years). Of over 2400 messages sent out (people were texted twice a day at different times for a week), participants reported encountering music 46% of the times they received a text. Of course this percentage strongly reflects the cohort, but that means that almost half of these 177 peoples' daily lives included music (indeed, the majority reported engaging in music listening for at least one hour a day).

While the results supported earlier work regarding where and when music was heard, importantly, Krause and colleagues focused on the level of control or choice that the participants experienced, and these findings can be considered with regard to everyday experiences and well-being. Results concerning the devices on which the music was heard indicated that mp3 players and personal computers (devices with high control) led to contentment and motivation, while the radio and broadcasted music in public (devices with low control) led to feelings of lethargy (Krause et al. 2015). The results considering the ways in which people select music (e.g., listening to the radio, choosing a specific item, random/shuffle, not having any control, someone else choosing, playlist, live performance, etc.) reiterated that one's experience of music in everyday life is related to control. Indeed, selection methods for which individuals perceive greater control gave rise to more positive responses to the music, including motivation and enjoyment (Krause et al. 2014). With regard to mood, people experienced positive affective experiences when their personal music was under their control, as opposed to music under the control of another person (Krause et al. 2014). Thus it was shown that newer,

digital technologies allow for more personalised listening choices, reflecting an active (as opposed to passive) use of music by the individual listener (Krause et al. 2016b).

The idea of control relative to music experienced in people's daily lives is important to consider with regard to mood and health and well-being more broadly. Research supports the link between control and health. For instance, a growing body of research has demonstrated that music listening can affect one's perception of pain and also one's recovery. For example, it has been found that preferred music increased one's tolerance and decreased anxiety when experiencing cold pressor pain (Mitchell et al. 2008) and a trip to the dentist, or having minor surgery under local anaesthetic can be better tolerated if we attend to music we know and like and use it as a distractor (Mitchell and MacDonald 2006). Overarchingly, it seems that an individual can use music under their own control positively. Broader extrapolation then links less control with less benefit, and certainly a lowered ability to self-manage via music.

Examining playlist uses in some detail, we might consider these to have potential 'self-medicating' functions. Digital listening technologies via playlists and mobile applications 'apps' can promote self-management of mood and health through their enhanced interactivity (Kibby 2009). As Tia DeNora (2000) asserted that listeners act as personal DJs, selecting music they feel they need to hear at different times and in different situations, playlists may afford listeners just that ability (Krause and North 2014). Indeed, in addition to using mobile listening devices to cope with stress and provide distance from unwanted environmental intrusions (Skånland 2011), it is possible that listeners could use listening apps to promote mood regulation and mindfulness. Recent findings concerning playlists considered everyday music listening in the context of eight different situations illustrated that preferred playlists differed by situation; moreover, the music selections were subject to injunctive norms (Krause and North 2014). That is, the music selected for a wedding playlist was much more homogeneous than that selected for listening when washing dishes or while on public transport—thus, broader social frameworks influence listening even at the level of an individual listener. Further, Jane Davidson and Sandra Garrido (2014) found that even traditional ceremonies like weddings and funerals are changing. For instance,

the deceased often leaves a playlist for the funeral that uses joyful music to celebrate the person's life and arouses responses such as fun and laughter in its aim to elicit fond memories rather than feelings of sadness and loss. This suggests that emotional function of music in ceremonies has the capacity to be used flexibly and for a range of beneficial outcomes.

As previously mentioned, little research has been done to consider macro-level correlates of music listening. However, recent research by Amanda Krause and Adrian North (2017c) demonstrated seasonal correlates of musical taste with regard to playlists. Specifically, their findings reported listening preferences for melancholy music for seasons of the year with cooler weather, arousing music during warmer seasons, and serene music for spring. Notably, these findings match the seasonal research concerning factors other than music, such as financial behaviours, criminal behaviours and mood disorders. Importantly, this sort of research highlights how cultural factors in everyday life may play a role in music behaviours, and Krause and North (2017c) advocate for more consideration of research across the macro areas of influence.

Thus far, we have explored social-psychological approaches to music and well-being in relation to listening; however, we now briefly summarise recent relevant findings that concern the health and well-being benefits of music making, again from a social-psychological and applied research perspective. Given that many chapters in the current volume are focused on music making, we have chosen to highlight some of our own recent empirical work to tackle this specific aim to give a fresh perspective (e.g., Lee et al. 2016).

Social-Psychological Research on Music Making and Well-Being

Participation Benefits to Well-Being

We begin this exploration of music making research by highlighting a challenge for researchers to identify the specific benefits that diverse forms of musical engagement may afford. In part, the difficulty arises in that many consider the value of participating in the arts as self-evident,

disregarding the need for systematic investigation into the topic (Skingley et al. 2011), and also because it is challenging to establish causal links between musical activities and specific health and well-being benefits (MacDonald et al. 2012). Moreover, two particular shortcomings concerning such work are the absence of both a common definition to 'health' and 'well-being' and application of a theoretical model (Clift and Hancox 2010; Livesey et al. 2012). Further, even though there has been a growth in terms of work that considers musical activities in terms of espoused well-being and health benefits, much of the prior work lacks objective evidence (Clift and Hancox 2010; Krause et al. 2016a).

Previous studies have highlighted positive relationships between music participation, health and well-being in terms of social, emotional, cognitive and physical health, musicianship, spiritual, identity, self-improvement and life satisfaction benefits. Illustrative examples of social benefits include networking, socialising and nurturing friendships (Eley and Gorman 2010; Jutras 2011; McQueen et al. 2013; Rohwer 2012), as well as feeling connected to and being involved in a community (e.g., Creech et al. 2013; Dingle et al. 2012; Gembris 2012; Von Lob et al. 2010). Emotional benefits include the use of music for mood regulation (e.g., Livesey et al. 2012; Judd and Pooley 2014), producing positive emotions such as feeling uplifted (e.g., Bungay and Skingley 2008; Coffman 2008; Hallam et al. 2012a; Jacob et al. 2009), stress release and relaxation (e.g., Clift et al. 2008; Jutras 2011), processing and expressing emotions (e.g., Bailey and Davidson 2005; Hays 2005).

Cognitive benefits have included thinking about self-esteem, self-worth and identity (e.g., Hallam et al. 2012b; Lally 2009). Other cognitive benefits refer to memory, concentration and intellectual stimulation (e.g., Creech et al. 2013; Gick 2011; Southcott 2009) and creativity and imagination (e.g., Kokotsaki and Hallam 2011; Lehmberg and Fung 2010). Music participation can facilitate spiritual experiences and transcendent feelings (e.g., Kokotsaki and Hallam 2007). These feelings may be religious in nature (e.g., Livesey et al. 2012; Rohwer 2010) or more broadly related to experiencing something "deep and meaningful" (e.g., Beck et al. 2000), a peak experience (Cohen 2007) or an aesthetic experience of beauty (e.g., Laukka 2007; Livesey et al. 2012).

Other social-psychological outcomes include perceptions of improved life satisfaction and quality of life (e.g., Clift et al. 2010; Douglas 2011). Sometimes this is referred to as life satisfaction or quality of life (e.g., Clift et al. 2008; Gembris 2008), while in other research, as feelings of satisfaction or a satisfying experience (e.g., McQueen et al. 2013; Tonneijck et al. 2008). Other research has pointed to benefits in terms of mental well-being (e.g., Dabback 2009; Jutras 2011); personal, overall or general well-being (e.g., Hays 2005; Lord et al. 2010); emotional well-being (e.g., Coffman 2008; Michalos 2005); and psychological well-being (e.g., Lehmberg and Fung 2010; Tsugawa 2009). In addition, evidence demonstrates that musical involvement provides an enriching experience (e.g., Tonneijck et al. 2008; Tsugawa 2009), adds meaning/purpose to life (e.g., Pothoulaki et al. 2012; Southcott 2009) and promotes feelings of vitality and rejuvenation (e.g., Forssen 2007; Gembris 2012; Varvarigou et al. 2012).

It is important to note, however, that previous studies have focused on different social-psychological elements making such work limited in a number of important ways. In addition to different foci (e.g., social or emotional outcomes), some research was conducted with a specific population (e.g., the elderly, professional musicians) and/or considered a specific type of musical participation (e.g., singing, community band). Moreover, results were reported largely independent of other work using researcher-developed and defined categorisations. Therefore, in order to address the lack of any empirical attempt to categorise the potential social-psychological benefits of music participation widely, we (Krause et al. 2016a) undertook a targeted mini review of the current state of literature. Ninety-seven of 202 original published works (meeting the selection criteria) identified well-being correlates in some manner. A meta-analysis revealed a number of facts about the present state of this research base. Firstly, most of the research that detailed well-being benefit was qualitative or mixed methods research, with little quantitative research. Secondly, most of the work was community participation-focused as opposed to explicitly healthcare or education/professional practice-focused. Thirdly, a surprising number of works did not adequately detail characteristics of the sample and/or methodology (e.g., type of music activity) involved.

Incredibly, the review data identified more than 500 musical correlates of well-being. As no previous empirical study has made a systematic categorisation of these correlates, we created a measure through a multistep process involving removal of redundancy, review by a panel of experts and a pilot test of the measure (Krause et al. 2016a). The 36-item measure, which covers five dimensions of social-psychological well-being benefit types (namely, mood and coping, esteem and worth, socialisation, cognition and self-actualisation), addresses a gap in the research and we regard it as a useful tool for future research.

In addition to the consideration of the benefits or outcomes associated with music making, a social-psychological perspective considers the motivations people have to participate in music making activities. Such motivations can be related to the perceived health and well-being benefits of participating in music making activities. For example, through focus groups with older community singers, the current authors and colleagues (see Lee et al. 2016) identified different motivations to attend community choirs. Some of the reasons were music-related (the importance of singing in their lives and experiencing pleasure from singing without pressure); however, interestingly, the majority of the reasons were tied to social and health benefits. In particular, these individuals highlighted how they experience spiritual and uplifting emotions, form bonds with the other members and find strength in overcoming their age, disease and hardships (Lee et al. 2016).

Supporting previous research, participation in the singing group provided the opportunity to experience benefits to health and well-being, including experiencing and working through emotions, socialising with other people and sharing experiences and creating purpose and meaning in life. While singing was a primary motivator to join the groups, participants expressed how the communal, social and health benefits (improved breath control) reinforced and sustained their involvement (Lee et al. 2016). This evidence serves to illustrate how social-psychological perspectives can illuminate micro- to meso-level factors contributing to musical experience.

The role of the facilitator (i.e., the person who leads the music making activity) was also highlighted (Lee et al. 2016). The facilitator is an important social-psychological variable influencing motivation for investment in and the potential outcomes of the music participation. Indeed leadership

style and facilitation practices represent an area ripe for research with regard to how facilitators can promote participation in a way that explicitly promotes and fosters health and well-being (Lee et al. 2016, 2017).

Given that in order to experience benefits from music making, people must be involved in a musical activity, it is important to consider how facilitators stimulate engagement opportunities (e.g., music educators, community music leaders) and then promote long-term investment in individuals. Recently, the current authors (Krause and Davidson 2016) conducted semi-structured interviews with leading European and Australian music educator-research experts aimed at identifying best practices that facilitate investment towards life-long musical engagement. Focusing on the study participants' reflections of their own practices and beliefs, findings indicate influences exist across different social-psychological levels—from the individual learner and teacher to curriculum and educational frameworks to broader community and cultural frameworks.

While focused on promoting investment, the interviewees shared information reflective of how the promotion of musical investment has implications for health and well-being. In particular, findings demonstrated that beyond being familiar with music as a performer, creator and listener, facilitators also needed to understand how music can serve socio-emotional functions. Moreover, best practice acknowledges that music making exists within a broader cultural context which influences/shapes the experience.

While the research evidence concerning the social-psychological benefits of music making is growing, additional work on well-being outcomes is needed. Importantly, as Raymond MacDonald (2013) argued, the need exists for research concerning the relationships between music and well-being to better understand the processes and outcomes of musical participation.

Theoretical Considerations

Since we opened this chapter by presenting a short historical overview of how social-psychological and applied aspects of music research began, we would like consider some current theoretical thinking that can guide

future empirical research focused on music and health and well-being. In particular, there are at least four theoretical models that offer different yet complementary perspectives, including David Hargreaves, Dorothy Miell and Raymond MacDonald's (2005) Reciprocal Feedback model, Albert Mehrabian and James Russell's (1974) Pleasure-Arousal-Dominance model, Martin Seligman's (2011) PERMA model of well-being, and Jane Davidson and Sandra Garrido's (2014) Music Listening Goals Framework.

Reciprocal Feedback Model

Presented by Hargreaves et al. (2005), the Reciprocal Feedback Model outlines how three components, namely, the *music*, the *situations and contexts* and *individual* reciprocally influence the individual's *response* (see Fig. 1). Each of the dimensions influences and interacts with the others as well as the response. Important to the present discussion are three points. Firstly, as Hargreaves (2012) stated, 'the music, the listener and the context are in a constant state of mutual interaction' (p. 553). Secondly, the *situations and contexts* dimension covers elements spanning

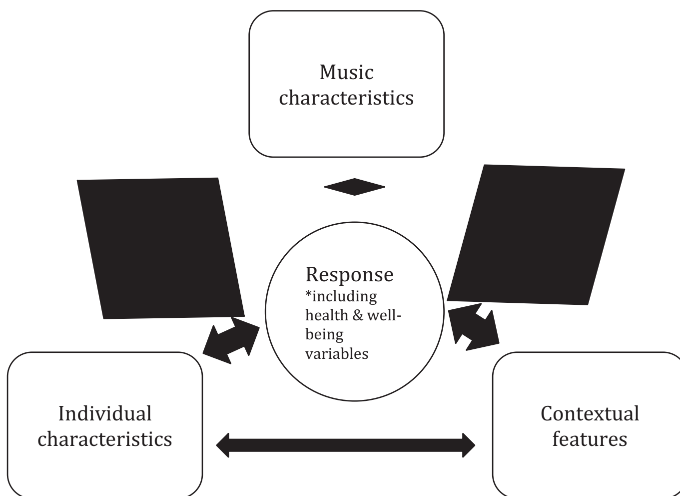

Fig. 1 Reciprocal Feedback Model based on Hargreaves 2012

Doise's (1986) levels of interpretation ranging from the broad cultural and social contexts down to everyday and immediate situations. Thirdly, in the revised and simplified reciprocal model of music processing, which more clearly encompasses music performance, creativity, listening and imagination, the response component may involve production, imagination and or perception of music (Hargreaves 2012). In this way, the theory applies to varied music experiences, including both listening and music making. The notion of inter-directional influences highlights how a response is not fixed, but depends on the interaction between the individual, music and context. By acknowledging the importance of contextual influences, the theory operates from a social-psychological perspective, making it a useful framework for considering music engagement with regard to health and well-being. Specifically, health and well-being variables of interest would occupy the middle *Response* space in the model. Whether focused on affective responses such as mood (e.g., the work discussed by Garrido above) or psychological well-being (e.g., the work by Krause et al. discussed above) or another measure of health, the model then takes into account the social-psychological influences.

Mehrabian and Russell's Pleasure-Arousal-Dominance Model

Mehrabian and Russell's (1974) model states that a person's response can be described in terms of three dimensions: pleasure, arousal and dominance. The pleasure dimension is defined as feelings of happiness to unhappiness; arousal is defined as mental alertness (e.g., sleepiness to frantic) or physiological arousal (e.g., increased heart rate); and dominance is defined as the feeling of being in or lacking control over one's environment (Mehrabian and Russell 1974; Yani-De-Soriano and Foxall 2006). The model has been used with regard to emotions and, recently, has been applied to everyday music (e.g., Krause's work on listening discussed earlier in this chapter). With regard to music, pleasure refers to the degree of preference or liking for the music, arousal concerns how arousing an individual finds the music, and dominance relates to how much choice and control a person has over their music choices (Krause and North 2017a, b).

While much research has previously considered music experiences in terms of pleasure and arousal, the addition of considering the dominance (control) dimension provides a richer understanding. Evidence regarding how we encounter our music (the earlier discussion in this chapter concerning the devices and selection behaviours) as well as the broader health research evidence concerning preferred music in pain and recovery settings illustrate that the concept of control is relevant to musical interactions. In particular, the model's dominance component links the idea of control directly to a person's experience of the situation and their surroundings. Krause and colleagues acknowledge that more research attention is needed to refine its application (Krause and North 2017a, b) including the consideration of music making in addition to listening, and future work could specifically address health and well-being outcomes. In particular, this promising theoretical model can be focused on well-being by considering how experiencing different levels of pleasure, arousal and dominance in combination might better promote health and well-being through music engagement.

PERMA Model

From positive psychology, Seligman (2011) constructed the five-component PERMA model of well-being. The five components include positive emotions (experiencing emotions such as hope, contentment, empathy and love), engagement (being deeply involved in a chosen activity or pursuit), relationships (regarding a person's ability to foster positive relationships with other people), meaning (which refers to having a deep understanding of why and how one does things) and accomplishment (one's goals and ambitions). This psychological model offers a framework for which the value and experience of music interactions/engagement can be interpreted, especially with its explicit focus on well-being (Lee et al. 2016, 2017). Using case study data describing successful Australian school music programmes, Lee et al. (2017) illustrated that school not only focused on skill development but provided opportunities aligned to the five PERMA categories, which, in turn, offered psychological well-being for all those involved. When designing future research on

health and well-being, this model offers an interesting framework and has clear implications for practice.

Music Listening Goals Framework

Focused on self-selecting music for listening in the everyday context, Davidson and Garrido (2014) offered a mood regulation framework concerning listening outcomes. Through various listening goals, both adaptive (e.g., improved mood) and maladaptive (e.g., rumination, worsened mood) outcomes can be experienced. Thus, it has a health focus. Moreover, although Davidson and Garrido presented the framework relative to listening, research has identified the included motivations as pertinent to both music listening and making. Thus, there is the potential to expand upon this framework to encompass music engagement more broadly (Fig. 2).

It is important to note that the four models mentioned above are not in conflict with each other. Rather, one can easily see how they fit together. Davidson and Garrido's (2014) listening goals framework provides depth to the *individual* component in the Reciprocal Feedback Model. Moreover, the consideration of pleasure, arousal and dominance

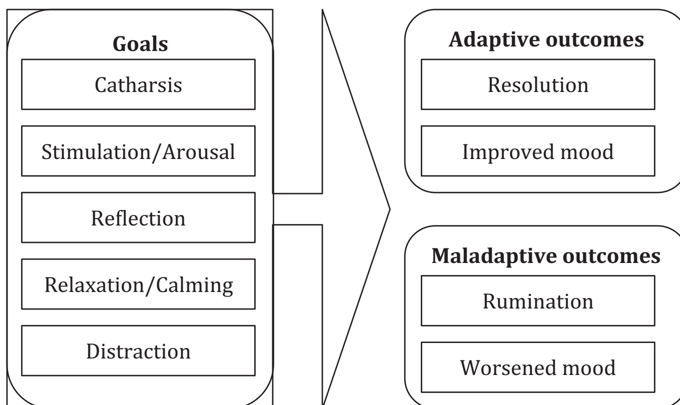

Fig. 2 Mood outcomes from music listening/making based on Davidson and Garrido 2014

(control) provides depth to understanding the individual's characterisation of the *music* and *situation* as well as his/her *response*. Applying the PERMA model's breadth facilitates consideration of psychosocial well-being across a range of dimensions. Moreover, though they may not explicitly focus on explaining health and well-being, by considering musical experience and engagement using such social-psychological approaches, these theoretical models can frame explorations into health and well-being response.

Conclusions

In summarising some of the most recent research and theory on the social-psychological and applied aspects of music engagement, we have demonstrated how a social-psychological perspective can help to understand how such influences shape our musical experiences and health and well-being. Such social-psychological influences range from micro- to macro-level determinants, interacting across the levels to influence our experiences every day. Just as the words 'health' and 'well-being' were not a part of Farnsworth's discourse, not all of the recent social-psychological work explicitly labels itself as pertaining to health and well-being. Regardless, it is clear that music continues to be explored with regard to its social uses and that the associated findings help to refine our understanding of the connection between music and well-being.

As pointed out earlier in the chapter, one of the shortcomings of this kind of research to date has been its lack of consideration of non-Western and cross-cultural contexts. The current researchers are engaging with exciting work that intends to blend the social and applied psychology of music with acculturation psychology (Berry et al. 2011), in which we wish to explore the processes involved in musical cultural exchanges between two or more initially distinct groups. We hope, through this exploration, to understand the changes enacted in each group as a result of these musical exchanges and will consider the broader health and well-being benefits.

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Promoting Social Inclusion, Equity and Well-Being for Young People with Autism Spectrum Condition: A Community Music Facilitator (and Parent) Perspective

Michael Whelan

Autism is a complex disorder of the brain, which is characterised by varying degrees of difficulty in social interaction, communicating and using language and abstract concepts. I just looked that up on the Internet. It affects one in 100 people in Australia. I looked that up as well. Although as the parent of a young person on the autism spectrum, I didn't have to. My interest in autism spectrum condition was drawn sharply into focus when my first child was diagnosed with autism in the late 1990s, and the intervening years have served as an intensive apprenticeship in embracing difference and a comprehensive distraction from my academic work in film music and creative technologies. I left academic teaching in 2001 and spent the following ten years earning my keep as a home parent and learning more about autism.

For parents of a child on the autism spectrum, the early childhood and schooling years are a whirlwind of coordinating therapies, interventions

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and structured supports, combined with countless hours of networking, research and often grief. When most neurotypical children finish school they commence their transition to parties, study, apprenticeships, skate parks, peer groups, part-time jobs, shopping malls and adult lives. But when young persons on the autism spectrum complete their schooling, their transition to claim the full complement of modern adult citizenship can grind to an agonising halt due to the impenetrable wall of social complexity that is life.

High school can be a nightmare for many resilient teenagers struggling with academic workload, peer pressure, body image and social relationships. Add the challenges of autism and young people who survive secondary school deserve a medal. Bullying is rife in schools and students on the autism spectrum are consistently bullied more than their neurotypical peers (Sreckovic et al. 2014). For most young people with autism, completing secondary school is something akin to thankfully falling off the edge of a cliff. Relief that the intense pressure of social conformity is removed, but apprehension when leaning into the heavy fog of an uncertain future.

Current Australian research on the quality of life of young adults with autism paints a bleak picture. Young people on the spectrum who have completed or stopped attending school have an unemployment rate between 45% and 50% (Autism Spectrum Australia 2013; Neary et al. 2015). They have very low rates of tertiary education participation and only a 28% completion rate in post-secondary courses. Less than 50% of young people on the spectrum have a regular group of friends (Neary et al. 2015) and the ASPECT study (2012) reports that between 50% and 70% of this cohort experience significant anxiety and depression. The most astounding statistic, and one which illustrates the sense of isolation experienced by this cohort, is that on average, adolescents on the autism spectrum spend 68 hours per week engaged in solitary technology-based activities (Neary et al. 2015). That amounts to over nine hours of screen time each day!

The prolonged hibernation of autistic teenagers into bedroom digital caves following secondary school is a phenomenon many families observe. This long-term exclusion from social contact with school friends, and in

some cases family members, can herald an erosion in self-esteem, confidence and social functioning for many young people with autism that, without intervention and support, can entrench experiences of social anxiety, depression and agoraphobia. For many young adults on the autism spectrum, the digital cave is an attractive alternative to social interaction with family and friends, though because the online social universe lacks the primary and overwhelming imperative of real life, it doesn't happen in real time, it happens at the speed you want it to. Real-time social interaction is generally one of the most difficult tasks a person with autism can perform. Keeping pace with changing topics, reading body language, decoding subtle ironies and in-jokes all converge to create a situation where an adolescent or young adult on the spectrum can quickly isolate themselves from their neurotypical peers. It is in the context of this coalition of limited environment, low educational engagement and poor employment statistics that young people on the autism spectrum inhabit a substantial health gap in Australia.

The social and emotional well-being of a young person with autism, like all members of the broader community, has at its core a sense of community, belonging, safety and connectedness. '*Equality of opportunity for all*' is listed as a core value in the Commonwealth publication *Australian Citizenship: Your Right*, *Your Responsibility*, (Australian Government 2014), yet participation in this promise of full citizenship, and the implied equality and opportunity, is an undiscovered country for many neurodiverse young people in Australia. And with the key social determinants of health, as outlined by the Australian Institute of Health and Welfare (2016), including social exclusion, social capital and employment and work, it seems that young people with autism are faced with considerable difficulty accessing the healthy environments they need to thrive in. One of the six priority areas listed for action in the Federal Government's 2010–2020 National Disability Strategy (Commonwealth of Australia 2011) is the transition from education to employment and life-long learning; yet, where are the programs? Where are the public health, employment and education initiatives to support young people with autism to realise their potential?

The opportunity to engage with this largely invisible tribe of digital natives popped up onto my professional horizon in March 2014. As most community arts workers will attest, community arts practice is less of a job description and more an intuitive path of discovery. Actually, path sounds too orderly; it's a winding bumpy track. My own experience of community creative engagement began in the 1990s working, with Queensland's peak disability arts organisation, 'Access Arts'. I coordinated music workshops for association members and directed plays whose participants experienced a range of disabilities and access issues, ranging from autism and hearing impairment to mental illness and acquired brain injury. I contributed to the design and installation of a sound sculpture with the blind community in Dutton Park, composed music for a wheelchair ballet with Indigenous artists at the base of the cliffs at Kangaroo Point, and directed an adaptation of Shakespeare's *Macbeth* with three mobility impaired and completely brilliant witches. My experience of community arts practice has been a chaotic adventure, a lesson in life and most of all, a profound privilege.

Following my sabbatical as an autism home parent and the publication and distribution of some of my resources designed to support social inclusion for young people on the autism spectrum, I was invited in early 2014 to develop and launch a post-school transition program for young people on the autism spectrum by Autism Queensland. Autism Queensland is the state's peak provider of services to people on the autism spectrum and their families and, prior to 2014, was limited in its service offerings to school-aged children and respite services. The proposed program would be the organisation's first service for young adults outside of the school system, and also Autism Queensland's first full fee-for-service program; a litmus test for client-driven service delivery in a soon to be launched Commonwealth National Disability Insurance Scheme (NDIS) funding environment. 'Studio G', as the new program was titled, would also be the organisation's first service that didn't fall under an educational or clinical framework. In an organisation staffed with teachers, occupational therapists, clinical psychologists, speech pathologists and physiotherapists, the appointment of a musician in a senior program development role was a testament to the then Chief Executive Officer's flair for innova-

tion, adventure and risk. We were hence moving into a territory where arts practice could be both immediately 'therapeutic' for the individuals involved and a broader lever for social inclusion and social justice. This program was intended to alleviate a lot of the social determinants of health and well-being I outlined at the beginning of the chapter in terms of social isolation and education-to-employment transitions for young people on the autism spectrum.

The brief was brief. 'Research, design and deliver a program to support young people in the transition from high school to whatever was happening next in their lives … use computers, they're fun!' The extraordinary leap of faith made by the Autism Queensland executive was to support the implementation of a digital creative arts program to meet the needs of this cohort. By commissioning an arts program, as opposed to a multidisciplinary clinical team, the emphasis shifted immediately from critiquing participants' deficits (which speech therapists, occupational therapists, psychologists and physiotherapists have been doing since they were diagnosed) to the range of finely tuned creative skills that over nine hours a day of intense engagement can provide.

Studio G was designed as an interactive creative workshop supporting young people with autism to develop social skills, life skills and ultimately job skills, and the target group was this invisible tribe of hibernating digital natives. A specific set of aims were designed to:

- enhance social participation and build friendship networks
- enhance quality of life and happiness
- develop prevocational skills
- facilitate the transition to further study and/or work

Studio G commenced on 15 July 2014 with a cohort of nine participants. The program is now almost three years old and runs at a capacity enrolment of 24 participants in Brisbane, with a one-year waiting list for families wishing to join the program. Studio G has also launched a satellite program in Mackay (North Queensland), with other centres set to follow. Three core principles underpinned the establishment of the program:

1. Studio G is a strengths-based program
2. Studio G is not a remediative program
3. Studio G employs established and emerging digital artists as peer mentors.

I don't wish to diminish the many benefits that clinical professionals' insights and skills have provided to our family (and countless others) over the past 18 years, but the message here was different, 'Take a break from your challenges and let's explore your strengths, let's have a go at the good stuff!!' The decision to focus on the development of individual strengths rather than deficits is at the core of all community arts practice, and in sharp contrast to most clinical programs, which typically devise strategies to address specific areas of need (Hill 2008).

Let's make something! Whether the circumstances are a group of teenagers enrolled in a holiday arts program, unemployed men participating in a song-writing workshop or at-risk rural youth making videos of their lives and experiences, hatching creative plans is the stuff of dreams. Most community arts practice is grounded in a constructivist model of learning through doing, experiencing and making. In the case of Studio G, the disciplines chosen to capture our target market of hibernating creatives were computer game design and animation. The only requirement for participants was to bring a laptop, and if they didn't have one we would provide them with one.

An extremely useful source of information for the use of computer games in Studio G was a program established in Victoria called 'The Lab' (n.d.). The Lab is a technology club for children on the autism spectrum aged 10–16 years. The program offers a safe social environment and tuition by technology professionals in areas such as programming, digital design and gaming. The Lab project commenced in 2009 in Melbourne through funding from VicHealth's Connected Lives (2016) project and has now grown to numerous community centres and schools across Victoria and New South Wales. The Lab is a social inclusion program whose methods are primarily informed by Kearsley and Shneiderman's (1998) Engagement Theory and broader constructivist-based theories of technology enhanced learning and drew social inspiration from community education programs such as '826 Valencia' in Seattle. The program

leaders at The Lab staff provided useful guidance on the topic of software access and broader issues relating to the scope of technical support required to deliver their program.

The design and implementation of the Studio G program unfolded during a whirlwind four months, from receiving the brief to launching the service. The anecdotal evidence from my own parent network of the need for a program to meet the diverse needs of young people on the autism spectrum was overwhelming. In addition to this avalanche of personal accounts, the research surrounding the situation young people on the autism spectrum find themselves in following the completion of school painted a very bleak picture.

In terms of a program delivery model, Studio G runs two afternoons per week in ten-week terms, four terms a year. A constructivist model of project engagement combined with Kearsley and Shneiderman's (1998) emphasis upon collaborative and non-academic work fostered a creative, meaningful and authentic environment for the program. The final program structure was influenced by a range of random yet crucial factors, including opening hours and availability of specific rooms at our chosen venue, more than one contact session per week to help establish a frequent pattern of venturing out of the house into the world, the number of hours per week we could afford to pay mentors, and my capacity (as program manager) to supervise the venture.

At the centre of Studio G service delivery is a peer mentor model. At the time of writing, the average age of the six mentors at Studio G was 24 years, which places them within a similar youth culture frame as the participants in the program whose ages ranged from 16 to 24, but with most aged around 19 years. I'd like to take credit for the recruitment of the extraordinary group of young people who make up the Studio G mentors as they are continuously singled out by participants, parents and visiting researchers, as the most crucial ingredient in the continuing success of the program, but I can't. The truth is that the young creative artists who form the backbone of the program bring a unique combination of social and emotional connectedness, creativity and empathy to their role as autism mentors. Their collective interest in digital-arts practice, combined with their desire to work with young people on the autism spectrum, seemed to self-select the most brilliant

creatures. And as the program has grown over the last two years, the mentor tribe has gone on to recruit its own, in an underground word-of-mouth whisper, as vacancies emerge in the growing program. The counter-intuitive element, from a human resource point of view employing arts students and young 20-somethings, is the absence of staff turnover. Apart from two mentors who moved to full-time positions in their chosen area of practice, nobody leaves! Studio G is starting to sound like a cult, right!!!

Digital creative arts practice is grounded in both an aesthetic framework and a diverse range of ever changing and evolving software tools (Cominos et al. 2010). Monolithic platforms such as Adobe Creative Cloud, Avid Pro Tools and Autodesk Maya deliver autonomous creative potential to individuals across the planet at the click of a download. And this shared vocabulary of authorship is available to an army of creative autodidacts playing and learning till the wee hours, as they build cathedrals of aesthetic and technical knowledge from sources as diverse as online manuals, You Tube tutorials and FAQ chat groups. One of the unifying features of the newly minted Studio G creative mentors and participants is that as digital natives, they share the same learning methods, the same private problem solving odysseys and the same language of learning. Simply opening a laptop on a Laminex table at Studio G ignites a quirky conversation that can deplete the oxygen in surrounding suburbs. This unifying digital lingua franca is at the core of the mentor/mentee relationship at Studio G.

With a ratio of one mentor to every four participants, mini tribes were established within the program with criteria for allocation to groups based broadly upon the areas of interest of the participants, combined with the areas of expertise of the mentors. The expanding group of mentors recruited for Studio G were a combination of current students or recent graduates of creative industries courses from both Queensland University of Technology and Griffith University. The mix of disciplines represented by the mentors ranged from game development degrees, animation studies and music technology courses. I had initially envisioned a suite of multiple strands in the post-school services area at Autism Queensland, with Studio G focusing upon games and animation, and developing additional strands which focused upon disciplines including

photography and graphic design, creative writing and short film making, and music for games and film to be rolled out at a later date.

Following the commencement of the program in July 2014, and the experience of the first term of program delivery, it became apparent that the creation of specialised discipline streams was redundant. As the program commenced, and mentors began working on participant-designed projects, it became apparent that this vocabulary of shared experience also manifested itself in both aesthetic and technical interdisciplinarity. As a musician working intermittently in film music and media, I have a working understanding of narrative genres, digital video production techniques, file codecs and other tech-related requirements of the genre. But as the parent of a 20-year-old, I'm not a digital native. I frequently require the assistance of teenagers to convert a file or resolve any number of quirky screen-based dilemmas that my analogue cultural inheritance leaves me ill-equipped to manage. But the mentor who majored in game development also knew how to manage audio compression, music midi files and sound tools. And the music technology graduate also knew how to manage media assets in the game building engine!! And they both knew Photoshop inside out and had a keen sense for the aesthetic—what worked and what didn't! My analogue brain had imagined silos of discipline practice, intersecting only at the boundaries as genres prescribed and projects dictated. The ascent of a unified and borderless interdisciplinary digital-arts practice is a field of substantial further inquiry, but outside of the scope of this essay.

Having access to a supportive and inclusive environment, technology labs and a recording studio played a substantial role in the participants being able to achieve their creative goals. The choice of venue for delivering Studio G was guided by a number of influential factors. Buildings and precincts are loaded with values, assumptions and messages. While navigating service providers for the range of clinical interventions for our newly diagnosed autistic son in the early 2000s, the unifying feature of most service providers was a built environment designed to shield the client from the gaze of others. Reflective glass windows, internal courtyards and two-metre high timber fences were a recurring design motif. The imposed segregation of grieving families in spaces designed to reinforce separateness provided solace to us on a bad day when managing

challenging behaviour. But locating a program like Studio G in a segregated 'disability' setting would only serve to reinforce messages of deficit and exclusion, not potential and inclusion. The social integration of 'devalued people' in a 'valued setting with valued activities' (Cocks 2001, p. 15) needed to be our unequivocal message. The State Library of Queensland launched 'The Edge' in 2010 as a 'library of the future' to empower Queenslanders to explore creativity across art, science, technology and enterprise (edgeqld.org.au). Apart from its premium location in Brisbane's Southbank arts and cultural precinct, the space is funky, glass, open and, most of all very, very public. In addition to The Edge's open-plan design, the ethos of the venue is one of equity and access, making the tools of digital creativity available to the broader community.

With the ambience in the room starting to relax, and the anxiety of new people, places and purpose starting to subside, the growing tribe began to connect and create. And they are a tribe, individually and collectively the Studio G group began to establish a communal identity which, when a quorum formed, projected a delicious mix of intensity, gentleness and chaos. The expanding throng of young people migrating to places like Cupertino and Palo Alto in California to work for companies like Apple, Google and Facebook are of this tribe too, I imagine. Quirky, imaginative and when the mood is right and the planets aligned, focused like a laser on an endless string of zeros and ones.

As per the majority of diagnostic literature, very few people on the autism spectrum possess savant skills like those demonstrated in the visual art of Stephen Wiltshire or the memory feats of Kim Peek. But as Michael Fitzgerald (2004) notes in his book on autism and creativity, a collection of the 'features of Asperger's Syndrome and High Functioning Autism' are uniquely grouped to support creative endeavour. The capacity to focus intensely on a topic to the exclusion of all else for very long periods, often to the exclusion of stopping for meals or sleep, is an incredible attribute for an artist (remember the 68 hours per week engaged in solitary technology-based activities!). This tenacity when working and creating in isolation is astounding, but once the tribe gathers in a room, the opportunity to share solutions, triumphs and dilemmas is too good to pass up. Not everyone is happy and communicative all of the time. *Ben* doesn't approve of discussion regarding the recent version of 'Halo' as he

thinks it unworthy of critical appraisal. *Henry* prefers people to mute their Apple computers when booting up because, as a Linux open source advocate, he prefers not to hear the audio logo due to his philosophical opposition to the global brand. *Jessica* emails her mother (and me across the room) if the internet download speed isn't up to national best practice standards of service delivery and *Jeff* wears his headphones when *Josh* is present because he finds his voice annoying. Simultaneously, *Lisa* is performing a song she has just written for the group despite her severe social anxiety, and *Jack* is showing anyone who walks past his chair the new 3-D costumes he has designed for characters he is modding for an online game portal.

Creative projects are devised by participants in consultation with their mentors, and a hidden curriculum of project management, time management, resource allocation, compromise and collaboration begin to unfold. Projects that have emerged over the past two years range from online computer games, e-commerce websites, tablet and hand-held device games, commercial graphic design projects, composition for short films and 3D printed costume accessories. Creative outputs are as diverse as the imaginations of the participants, and mentors liaise with the program coordinator to use these projects as scaffold for transition to the next stage in these young people's lives. Two program participants had strengths in music, and with the support of their music mentor, I had the privilege of watching these young people blossom socially, creatively and personally over a period of 12 months, as they engaged in a process of musical discovery and social development. This is about creativity and industry. Whether it results in a 'job' is in some ways irrelevant, but these young people are certainly achieving skills that will influence their future in ways that work with and develop both the strengths of individual young people and the tribe.

'*Peter*' is a 19 year-old, who wants to become a DJ. Using freeware and a range of downloadable hobby apps, he had been creating a range of beats, loops and basic dance tracks in his bedroom prior to joining Studio G. Peter had a fundamental love of sound, both its textures and its materials. So Peter and his mentor Greg decided to start building sound from sound waves up. They started with building a snare drum by compiling found sounds and foley audio they captured on a portable

recorder then layering them in the studio; compressing them, adding reverb, EQ-ing them. Once a snare drum was created then a kick drum and other timbres were to follow using this same process of textural audio sculpture. With the support of his mentor, Peter commenced a linear process of skills training and conceptual development in the recording studio to the point where he is now uploading his fully produced loops to commercial sites and has earned some small fees from the use of the loops by third parties.

'*Lisa*' is a 20 year-old, who plays basic keyboard and guitar, but her goal is to write and sing her own songs. She is a socially hesitant young woman who travels over 100 km on buses and trains to attend Studio G. Her social anxiety is very pronounced, and if the pressure of public transport has been particularly overwhelming, she might spend the first hour of the session sitting under a table away from the faces and hubbub of the group. Over a 12-month period working on lyrics, chords, sounds and ideas, Lisa's songs started to develop in a very private and quiet sequence of conversations with Greg in the corner of the open-plan room. Toward the end of her first year in the program, Lisa said in a quiet voice that she would like to sing for us. Initially I thought she meant Greg and me, but said she would sing to the whole group of 16 participants and four mentors. To my amazement, and everyone's awe and wonder, Lisa sang a song, unaccompanied, in a beautiful full voice to the group. You could have heard a pin drop at the end, then Lisa placed her head on the desk and covered it with some books and her day-pack to hide from the applause and cheers of everyone in the room.

Among all of the creative projects in animation, game design and creative writing, the musical journey of Lisa and Peter over a one-year period of Studio G resonates profoundly with me as both a music educator and as an autism advocate. For both *Lisa* and *Peter*, the transition from social isolation and community disengagement to creative participation and social and emotional well-being was both tentative and not guaranteed. But evidence (Ashburner et al. 2016) gathered over a six-month period in the second year of the program's delivery suggests the model offers an effective framework to support young people with autism to build self-esteem and social participation, which are vital determinants of health and well-being for this group and their families. With the

support of Dr Jill Ashburner, Autism Queensland's Manager of Research and Development, Dr Kate Van Dooren, postdoctoral research fellow at the University of Queensland, and research assistant Ms Natasha Bobir, a research project was designed and implemented in 2015, with a final report published in January 2016 on the Autism CRC website.

The research focused upon two main outputs: (1) psychosocial outcomes and (2) learning and development outcomes (Ashburner et al. 2016). The two key themes that straddle these categories are the role of the mentors and the nature of Studio G as a learning environment. Motivation and enjoyment were key ingredients in the psychosocial outcomes of Studio G, with the program enjoying a 96% mean attendance rate for the six-month duration of the study. The students' high motivation to attend, and enjoyment of the program, was reflected in comments such as 'I love Studio G … this is my place', they 'can't wait for the next Studio G day', and would 'like to keep going for the rest of the future' (Ashburner et al. 2016).

Emotional well-being, social participation and friendship were also key contributors to motivation and enjoyment, with 10 of the 11 participants in the study referring to at least one other Studio G participant as their friend. 'It was observed by one of the mentors that "there's certainly a lot more noise and a lot more interaction between the groups … that's the sociable side of things and that's exploded"' (Ashburner et al. 2016).

Family members and program participants agreed that Studio G was supporting learning and development outcomes in the areas of both skill development and an increased awareness of future work and study options. Students and family members frequently commented on how Studio G provided an opportunity for learning and developing skills (e.g., 'I've learnt heaps'—student). Comments from the mentors also demonstrated that the students were 'slowly gaining skills' and had 'all learnt something new' (Ashburner et al. 2016).

The second research focus was the ongoing professional development of the mentors. While a debrief and support structure is in place, there was a need for the provision of autism-specific evidence-informed strategies to facilitate learning and overcome the motivation challenges of the students. Strategies such as visual instruction methods, concept mapping and structured teaching are considered 'conventional wisdom' when

teaching and guiding young people on the autism spectrum through project development and task completion. (Ashburner et al. 2016)

Young people with autism can experience a range of comorbid conditions (Kohane et al. 2012), including depression, anxiety, sleep disorders, aggression, obsessive compulsive disorder, eating disorders and agoraphobia that can be exacerbated by the stresses of social interaction and environmental and sensory overload. With the complexity of these comorbidities as a backdrop, the need for specialist programs such as Studio G, which are designed to meet these complex and varied needs, is critical. The Studio G program took an ambitious, and possibly preemptive, leap into this service vacuum, leaving the architecture of a formal service scrambling to catch up with the rhetoric, commotion and deadlines. But the arts can do that sometimes in a way that clinical services cannot.

> Overall, the findings suggest that the students made substantial psychosocial gains that were attributed to their attendance at Studio G. These included high levels of motivation to attend the program, enjoyment of the program, increases in social participation and friendship, and improved emotional wellbeing. The students were also reported to have acquired many new skills. … The students' progress in the transition process was described as slow but real, with two of the eleven students having made the transition to further study or training during the six months of data collection in the study. (Ashburner et al. 2016)

There are a range of government and commercial programs and pathways to support neurotypical teens with their transition from school to training, employment, further study and the promise of full citizenship and '*equality of opportunity for all*'. In sharp contrast, the absence of programs for autistic young people leaving school reveals a substantial gap in educational, community and employment support. This is not merely an economic policy issue in regard to increased need for social welfare and unemployment, it is also an issue of health equity. The Studio G program is an outstanding example, in my view, of the potential that can be achieved in shaping positive determinants of health when arts practitioners bring their humanistic sensibilities, insights and creative assets into a space traditionally occupied by deficit-based clinical programs. And

from a health equity perspective, if '*equality of opportunity for all*' is truly a core value of Australian citizenship, the resourcing and development of programs that address the diverse needs of young people on the autism spectrum in their transition to adult life should be a priority.

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Michael Whelan is an academic, writer, musician and autism advocate. In addition to his memoir, *The Other Country: A Father's Journey with Autism*, Whelan also wrote the documentary film, *What are You Doing?* This educational film for school audiences on the topic of social inclusion and autism was distributed to every school in Australia and was screened at the United Nations in New York as part of World Autism Day activities in April 2013. Through Autism Queensland, Whelan developed and commenced delivery of Studio G, a post-school transition program for young people with autism. In July 2015, Whelan joined Queensland University of Technology as Associate Professor of Music in the Creative Industries Faculty, where he continues his work supporting young people on the autism spectrum.

Depression and Music: Approaching Health Equity Through Therapeutic Choir Singing

Kirstin Robertson-Gillam

Introduction

> People are like stained-glass windows. They sparkle and shine when the sun is out, but when the darkness sets in their true beauty is revealed only if there is light from within. (Elizabeth Kubler-Ross)

Participating in music activities can stimulate a "sparkle and shine" for depressed people, affecting all areas of their development. Its effectiveness for calming anguish and agitation over the centuries is well documented. For instance, the Biblical reference of the shepherd boy, David, soothing King Saul's mental anguish by playing the harp is well known in Christian culture. Music engages the senses and stimulates listeners and players to enjoy it.

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Music and the Brain

Studies in neuroscience demonstrate that by engaging in musical activities more areas of the brain are stimulated in contrast to non-musical activities. Singing affects more brain structures than speaking (Norton 2016, p. 23), and engaging in memory tasks that include singing can have protective effects against the neurological deficits caused by dementia (Thaut et al. 2005, p. 249).

Depressed people are restricted in their ability to adequately express emotions and modulate their moods. Neuroscientific literature demonstrates that participation in music activities enables appropriate expression of emotions and mood modulation in people with depression (Bodner et al. 2007; Halpern and Bartlett 2011; Koelsch et al. 2010; Naranjo et al. 2011). Furthermore, music can also lift moods by increasing abnormally low levels of dopamine, the neurotransmitter responsible for abstract reward, and by stimulating dopamine receptors, which directly affect moods and motivation (Castillo-Pérez et al. 2010). Additionally, group music activities such as singing or drumming have been shown to have positive effects on mood (Burgdorf and Panksepp 2006; Castillo-Pérez et al. 2010).

People can learn new music skills by imitation and concentration. The mirror neuron system interacts with the limbic system providing the means for the brain to understand the complex patterns of musical signals. This mechanism can provide a neural substrate for subsequent emotional responses when singing in groups through a shared representation between singers and listeners, thereby enhancing social interactions (Molnar-Szakacs and Overy 2006). Mimicking others is often how we learn. For instance, a choir leader may demonstrate the shape of a new melody by making figures in the air for choir members to follow.

When people are depressed, the hippocampus (which is responsible for generating positive emotions) shows reduced formation. This improves significantly after involvement in singing or music listening activities (Koelsch et al. 2010), demonstrating the powerful nature of emotional expression through music.

Acute and chronic depressive episodes can slow responses to stimuli in the frontal cortex of the brain. Word finding and sentence generation can be challenging, reducing thinking and communication abilities. Choir

singing is one intervention that combines language and music in safe and enjoyable ways. Brown et al. (2006) found that the brain uses parallel pathways for generating melodies and sentences. The brain will try to compensate by making use of these bihemispheric pathways when trauma such as stroke occurs. Accordingly, those who can no longer speak can still sing and learn to speak again by capitalising on preserved singing abilities (Albert et al. 1973). Speech and Music Therapy for Aphasia [SMTA] "combines speech-language and music therapy principles … to facilitate speech fluency and production via melody and rhythm" (Bruijn et al. 2011, p. 206).

When choir members become synchronised, they experience feelings of well-being. Vickhoff et al. (2013) found that the structures of songs, respiration and heart rates were all connected, with unison singing of known, regular song structures creating a synchronisation of heart rate variability so that they decelerate and accelerate at the same time. Accordingly, choir singing was found to relax the vagus nerve, resulting in feelings of well-being and connectedness. This research gives further support for the role of therapeutic choirs to promote social capital and health equity in community settings.

Emotional modulation is required for building successful social relationships. People with depression have difficulties in this area, leading to negative interactions with others. Brain studies demonstrate that active participation in music can assist learning emotional regulation, evidenced by changes in the fronto-temporo-parietal areas of the brain, for people with major depressive disorder (Erkkilä et al. 2011; Fachner et al. 2013).

Some researchers have reported that the brain will utilise the same music patterns, whether it is listening to music or imagining it (Levitin 2002). It seems that by simply listening to music, dopamine production will increase and anhedonia (inability to experience pleasure) will improve (Castillo-Pérez et al. 2010). This can be of benefit when depressed choir members practise their songs between choir meetings.

Depression

Depression is well known for its long-term deleterious effects on cognitive, psychological, physical and social functioning, reducing quality of life and well-being for millions of people throughout the Western world

(Kessler et al. 2003). Currently ranked as the third leading cause of disability in the Western World, major depression can cause resistance to medical treatments leading to depression-related disabilities (Eisendrath et al. 2011). It is often associated with other health conditions, such as generalised anxiety disorders (GAD), medical conditions and impairment in psychosocial functioning (Kessler et al. 2003).

Features of Depression

Typical symptoms associated with depression include depressed mood, loss of interest in life activities, anxiety, irritation, numbness, gastro-intestinal disturbances, sleep disturbances, worry, rumination, suicidal ideations with attempted and completed suicides, memory loss, social isolation and loneliness, anger, hostility and irritability. It can be closely linked to serious medical conditions such as heart disease, diabetes and rheumatoid arthritis (American Psychiatric Association 2013). Furthermore, adverse life events are considered to affect brain functioning, rendering the individual more vulnerable to developing anxiety and depression (Barlow 2004). These symptoms can have devastating effects on an individual's life, with lost career opportunities, difficult relationships and reduced social functioning. Social isolation is one of the most devastating consequences of major depression, significantly decreasing quality of life.

Phases of Treatment in Depression

In the acute phase of a major depressive episode, treatment is aimed at reducing and eliminating as many symptoms as possible to restore the patient to adequate work and psychosocial functioning. Later stages aim to prevent relapses and reduce recurrence as much as possible with the combination of pharmacotherapy, ongoing education and depression-specific psychotherapy (Kirsch 2010). According to Kirsch (2010), pharmacotherapy is more effective for achieving these aims when it is combined with psychotherapeutic approaches. One major psychotherapy treatment for depression is cognitive behaviour therapy (CBT) for

reframing negative attitudes, cognitions and images. Music and language are intimately linked (Brown et al. 2006), so that music in the form of song lyrics and melodies can be utilised within the CBT framework, creating an enjoyable and engaging form of effective treatment by replacing song lyrics with words that reflect the client's own emotional state within well-known melodies. Other ways of combining music and language are through choir therapy and group singing, in which choir members also learn articulation and the rhythm of speech.

Choir Singing

A Scottish community arts project named *Call That Singing*? reported that participants aged over 60 years showed overall improvements in general health during the 12-year period since the inception of the project (Hillman 2002). They also reported significant improvements to their quality of life, emotional well-being, self-confidence and appreciation of singing. The choir members contributed to the cultural economy and social fabric of Glasgow with increased visits to museums and concerts, and active participation in the cultural life of the city. Health equity was achieved by the members of this choir, bringing about a sense of social justice for older residents in Glasgow.

A choir club called *The Happy Wanderers*, comprising healthy seniors met over 20 years to perform in aged care residential facilities that included people with dementia (Southcott 2009). Choir members reported a sense of purpose and satisfaction for contributing to their community. They also formed relationships with others and helped members who became ill, supporting them when they entered aged care themselves. They all expressed a sense of commitment to their ongoing cognitive and educational processes. *The Happy Wanderers* choir demonstrated how older people can gain a sense of generativity by meaningfully contributing to their own community.

Clift and Morrison (2011) reported on the personal narratives of community choir members living with chronic and debilitating mental health issues. Their research suggested that the choir engendered positive feelings, joyful and uplifting experiences, positive moods, increased happiness

and enjoyment and distraction from internal negative thoughts and feelings. Choir participation generated improved moods and social interactions.

Similarly, Dingle et al. (2013) investigated how the choir called *The Transformers* could improve the social and mental health of people with chronic, severe mental illnesses and intellectual disabilities. Twenty-one participants aged 31–74 years had problems with homelessness, mental illnesses, drug and alcohol problems, and domestic violence. They described increased positive feelings and well-being, reduced stress, improved self-perceptions, improved singing abilities, feelings of belonging to a group, connecting with the local community, increased social networks and social functioning. They also reported improved health benefits, such as reduced medications for some members, and improved working capacity and enhanced daily life routines for others.

The Choir Therapy Program

The Choir Therapy Program begins with a mindfulness meditation segment followed by physical and vocal exercises, a vocal improvisation segment, learning new and old songs and a closing song as illustrated in Fig. 1 (Robertson-Gillam 2014).

Robertson-Gillam (2014) investigated the benefits of a community choir for reducing depression and anxiety symptoms in middle to later aged adults. Thirty-two participants were randomised into an experimental group ($N = 21$) and a control group ($N = 11$) and assessed for cognitive functioning (Folstein et al. 1975), depression (Beck et al. 1996, [BDI-ll]), quality of life (Skevington et al. 2004) and spiritual wellness (Spirituality Index of Wellbeing, [SIWB] Daaleman and Frey 2004).

The choir members met weekly for eight weeks in a community school hall, culminating in a final performance. The meditation segment at the beginning of the session helped to relax anxious and depressed choir members. They experienced benefits from the physical exercises involving stretching, running, bending and punching. The singing exercises taught breathing techniques: long, sustained notes, short staccato notes and vocal dynamics. The vocal improvisation segment was very enjoyable.

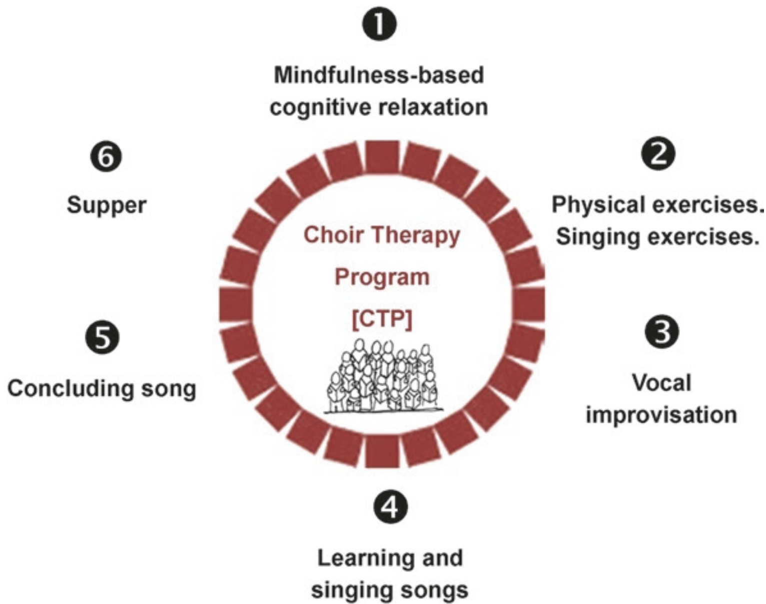

Fig. 1 Choir Therapy Program

The choir members were encouraged to move around the room, making any sounds they liked and exploring their own vocal ranges. Between each segment, some group discussions always ensued and questions/issues were addressed, taking into account all the various disabilities within the group. By the time the songs were introduced, they were more relaxed and ready to learn. They were given a song book compiled by the choir leader to reflect emotional themes related to depression and their age group. These songs ranged from spirituals, gospels, folk and classical. Each person was individually assessed for their vocal range in separate sessions outside the group choir practices. Songs were rearranged with extra harmonies inserted in order to meet the vocal ranges of everyone. The closing song was always the Latin chant *Dona Nobis Pacem* which they sang or hummed as they sat and filled out their survey evaluation sheets. The pianist played the song repeatedly and, over time, they began to spontaneously harmonise with each other. Following this segment, they engaged in supper with refreshments and social chit-chat.

In their weekly surveys, members reported experiencing reduced back pain after singing, more confidence when talking with people during supper breaks, and increased pleasure in their improved voice quality. One lady reported that the song lyrics replaced the constant humming in her head and a man reported less anxiety in a social setting.

Everyone showed enormous enjoyment and satisfaction after the whole choir mastered singing the gospel song *Shine on Me* in three-part harmony. Some experienced exhilarating transpersonal feelings of happiness, joy and well-being. They unanimously voted Leonard Cohen's *Hallelujah* as the top song. This song refers to past trauma and emotional turmoil to which they all related.

Their ongoing camaraderie continued outside choir practices when they met for coffee or had chance meetings in the local shopping centre. Others offered to pick up some members who could not drive to and from choir practice. No one missed a practice session during the entire eight week trial and many returned in the New Year following the study. Others joined ukulele, drum, walking and philosophy groups; demonstrating their increased confidence to engage with others, thus reducing their social isolation. They proudly formed their own group identity by naming themselves *The Serotones*.

The pre- and post-test scores indicated a significant drop in depression on the BDI-II, ($p = 0.001$) and increased well-being on the SIWB ($p = 0.013$). There was no significant change in quality of life when measured on the WHO QOL-BREF Index, although the social domain showed a promising trend. These psychometric scores were triangulated with pre and post interviews, as well as weekly feedback surveys. All data correlated with and validated each other.

Tracking the Depressed Brain with Quantitative EEG (QEEG)

A smaller pilot study was conducted within the larger choir therapy project using QEEG readings to track whether depression could be reduced with the choir intervention. Nine participants were randomised from the 21 in the original choir study. They all signed permission for this process.

The pilot study investigated whether choir singing could rebalance asymmetric brain wave frequencies (a marker of depression) using QEEG testing before and after the choir intervention (Petchovsky et al. 2013). The pre-test readings showed marked asymmetric brain wave patterns that are characteristic of depression and hyper-aroused anxiety (Kropotov 2009). The post-tests showed a rebalancing of these brain wave frequencies correlating with the depression scores and qualitative data.

Some participant comments supported these results: “Just singing uplifts me and definitely had a positive effect on my state of mind”; “social interaction’s been good”, “feel like we really achieved something”. The choir members became more socially aware, joined other community groups and took more interest in their health and well-being. All quantitative, qualitative and biological data correlated supporting the efficacy of the Choir Therapy Program (Robertson-Gillam 2014). Choir members became less anxious and depressed, more sociable and complained of less physical pain and mental health symptoms. They also reported enhanced intimate and family relationships. The choir members became more community involved and less isolated. Figures 2 and 3 illustrate the QEEG graphs, before and after the choir intervention.

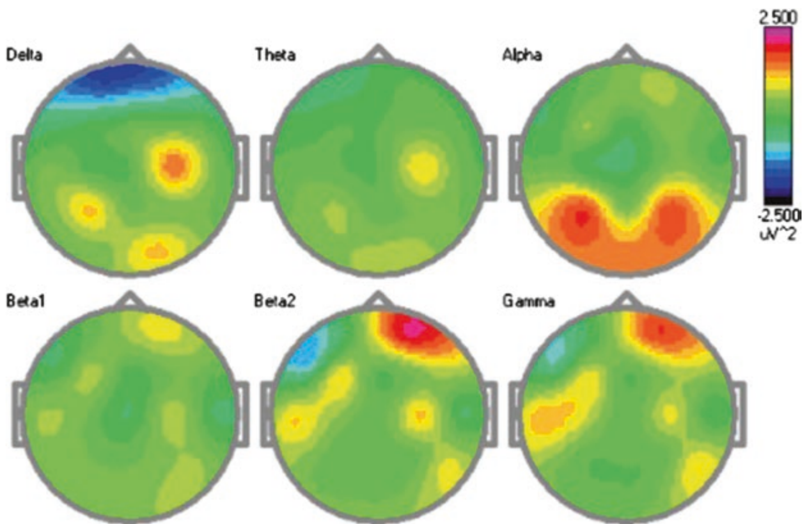

Fig. 2 QEEG scans before Choir Therapy intervention

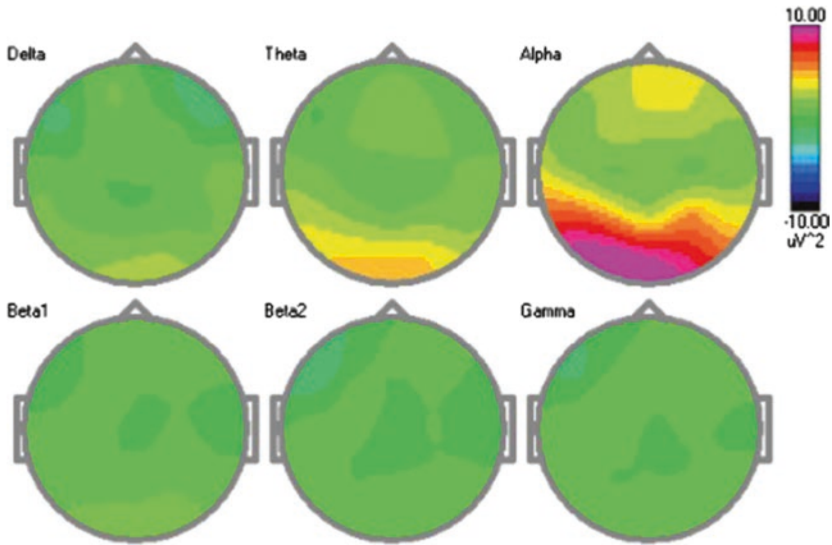

Fig. 3 QEEG scans after Choir Therapy intervention

Choir Singing and Dementia

> Music is no luxury to them [people with dementia], but a necessity, and can have a power beyond anything else to restore them to themselves, and to others, at least for a while. (Sacks 2007, p. 345)

Robertson-Gillam (2008) conducted a choir therapy study for reducing depression in people with late stage dementia. It involved 41 residents aged 73–95 years in 15 sessions of choir singing conducted biweekly and a non-music reminiscence programme, respectively with both groups, compared to a control group.

Dementia literature suggests that choir singing can be an effective intervention for health equity and social justice for people with dementia. For instance, Bannan and Montgomery-Smith (2008) concluded that it is possible for people with Alzheimer's disease to participate in group singing with longer-term benefits being reported by their carers, conferring more opportunities for increased quality of life.

Sixsmith and Gibson (2007) found that "music can enable elderly people with dementia to engage in activities that they find enjoyable, socially enhancing and personally meaningful, leading to increased personal empowerment" (p. 127). This study showed that musical abilities appear to be intact even with severe dementia.

The choir singing programme followed the choir protocol (above) beginning with mindfulness relaxation, individual *vocal conversations* (in which the choir leader asked them to sing *their* song with her), singing exercises and learning to sing known and not-known songs followed by a closing song. The reminiscence group participated in non-music group discussions using various objects of tactile and visual cues to stimulate memories and conversations.

The choir members responded well to individual vocal conversations, which built trust and confidence. One lady spontaneously sang *Summertime* by Gershwin, in a professionally trained voice, remembering over two-thirds of the lyrics. This was a surprise as no one knew she had been vocally trained. The message in the lyrics such as "hush little baby, don't you cry" seemed to evoke nurturing feelings towards the choir leader, with the lady leaning forward and patting the choir leader's cheek. This led to an enhanced relationship, which spread out into other facets of her life in the hostel as she began to relate to others. Previously, she had only ever uttered two to three word sentences and had socially isolated herself due to her advanced dementia.

A retired jazz musician with severe dementia joined the choir. He paced up and down in agitation for the first week, constantly holding onto the choir leader's arm wherever she went. He consistently refused to sing and was only able to remain in the choir group for up to 30 minutes in the first few sessions. The choir leader decided to utilise his constant movements. She asked him for a dance and the music therapy students assisted by playing the *Daisy Waltz*. He instantly transformed from an agitated and unhappy man, into someone who demonstrated professional dance steps in perfect rhythm, showing that his memories and music skills were still there, just waiting to be accessed. Following this first dance encounter, he was happy to remain seated until he was invited to get up and dance. He showed increased confidence and enjoyment,

remaining for the entire 60 minutes of the twice weekly choir practices. In the last five sessions, he remained behind after others left and played jazz scales on the piano, demonstrating intact music skills. The choir group enjoyed watching him dancing each week.

The overall results showed a significant decline in depression on the Cornell Scale for Depression in Dementia [CSDD] (Alexopoulos et al. 1988). There was a non-significant improvement of depression in the choir group, when compared to the control group ($p < 0.001$). Qualitative data found that people with severe dementia can be reached by recognising how the attachment behaviours from early childhood can manifest within the dementing process as they struggle to make sense of their world (Ainsworth et al. 1978). For instance, one lady during her post-interview said, "I feel like I'm back in the world again", a remark that reflected how isolated she had felt, living in her hostel. She began to reach out to others and became quite proactive within her hostel and wider social circle. The choir leader found that the choir singing promoted social engagement, lessening depressive symptoms. "They began to recognise each other and relate meaningfully, reducing … social withdrawal that typifies the dementing process" (Robertson-Gillam 2011, p. 101).

Ahessy (2016) replicated the above choir study in Ireland, measuring depression (CSDD), cognitive functioning (Mini Mental State Examination) and quality of life (Cornell Brown Scale for Quality of life) before and after the intervention. Ahessy's study followed the same choir protocol as the Robertson-Gillam study and results showed a significant decrease in depression ($p = 0.003$) and increase in quality of life ($p = 0.001$). Ahessy's participants had overall higher cognitive scores than Robertson-Gillam's participants. He measured their scores before and after the choir intervention, finding that cognitive functioning actually increased between the pre and post scores ($p = 0.011$).

Conclusion

This chapter explored the power of music to improve depressive symptoms through therapeutic and community choirs, thereby improving health equity and promoting social justice. Health equity seeks to abolish

socially unjust and unfair health disparities so that people from all levels of human societies have access to adequate education and services for health and well-being. This transcends the World Health Organization's (1948) definition of health which defines health as a "state of complete physical, mental and social well-being and not merely the absence of disease or infirmity" (p. 1).

Many people with social and physical disabilities can be denied access to adequate health services by the nature of their socially isolating conditions. Therapeutic choirs have the ability to decrease mental health symptoms and provide coping strategies for dealing with life in new and motivating ways. Music can generate positive responses and play an important role in emotional expression and mood modulation. In general, therapeutic and community choirs are socially engaging, addressing the problem of social isolation that accompanies major depression and generalised anxiety (Petchovsky et al. 2013).

The efficacy of therapeutic choirs leads to improving quality of life for older people, giving them new opportunities that promote meaning and purpose. Through this process, new choir communities that are supportive and inclusive are created for those who are isolated due to their mental health. They offer new and positive perspectives that can give depressed people hope and motivation to re-engage in life. Surely, therapeutic choirs express the essence of what health equity and social justice mean within societies, so that others can learn more tolerance and acceptance of those less able to engage in normal ways. Music making *levels the playing field* and unites people from all walks to life to *play* together in the spirit of acceptance and tolerance.

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Health and Well-Being Benefits of Singing for Older People

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Introduction

> 'Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity'. (World Health Organization 1946/2006)

Since the late 1990s, there has been a considerable growth of research on the positive physical, mental and social benefits arising from active engagement in group singing. Much of this research has focused on the value of singing for older people in community and care settings. An increasing body of research has also explored the value of singing for older people with specific long-term health conditions.

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Alongside this research, the last 15 years have also seen growth in the number of organisations and initiatives directly promoting the provision of group singing for older people. Many of these initiatives document the value of the activity through testimonials and short films. In the main, this has occurred despite a lack of robust scientific evidence of benefits and entirely on the basis of positive experiences and feedback through practice.

This review provides an overview of the growing body of research evidence on the value of singing for the well-being and health of older people. It updates an earlier review undertaken as part of an innovative project led by the UK charity *Live Music Now*, to promote 'A Choir in Every Care Home' (Clift et al. 2016).

For the purposes of this review, use was made of the existing database of research held within the Sidney de Haan Research Centre for Arts & Health built up since 2005. New searches were also undertaken through online bibliographic sources such as Medline and Psychinfo with search terms, such as older people, singing, health, well-being and care. These searches were supplemented by use of Google Scholar and ResearchGate to search for sources on singing and well-being. An examination of sources cited in recent publications was made to locate additional material. Use was also made of a number of recent systematic reviews on singing, health and well-being to ensure comprehensive coverage (Clark and Harding 2012; Daykin et al. 2016a, b; Gick 2011; Gick and Nicol 2016; Grindley et al. 2011; Lewis et al. 2016; Reagon et al. 2016). In addition, in the course of preparing this review new reports continued to be published and details were obtained directly from researchers active in the field of music and health (e.g., Coulton et al. 2015; Fancourt et al. 2016).

Older People Participating in Choirs and Community Singing

The largest study of health and well-being among singers in established choral societies and choirs is reported by Clift and colleagues. This survey, built on an earlier pilot study (Clift and Hancox 2001) included over 1000 participants in Australia, England and Germany (Clift et al. 2009; Clift and Hancox 2010; Livesey et al. 2012). The average age of the

choristers was relatively high (mean = 57) with a third aged 60–69 and a fifth aged 70 plus. It reported strong evidence on the positive effects of singing on feelings of happiness and well-being. Choir members reported that singing increases happiness, gives a positive attitude to life, improves well-being and releases negative feelings. Comments from participants included:

> *I meet like-minded people and enjoy music making. Hearing the harmonies helps me forget family worries*
>
> *When recovering from a major stroke, singing was one of the ways of lifting my spirits out of depression*
>
> *Deep breathing, essential for singing, is one method of helping with signs of anxiety and stress*
>
> *You are kept fit by choral singing because you breathe correctly and engage your whole body in the activity*
>
> *I think choral singing is a particularly valuable and worthwhile activity with a real sense of achievement at a time when one might be feeling one's usefulness is declining*

The themes reflected in these comments are found in further studies of older singers in established choirs throughout the world. Southcott and colleagues, for example, report a series of five qualitative case studies, as part of a large-scale project started in 2008 to consider the benefits of community singing in active ageing (Joseph and Southcott 2014a, b; Li and Southcott 2012; Southcott 2009). Questions largely focused on the perceived benefits of choir membership. Five community choirs were involved with between 10 and 50 people in each. The membership was predominantly female with an age range from 50 to 90. All were Australians, but from different ethnic and cultural backgrounds. The recurrent themes were:

- physical activity—staying active, getting out of the house
- personal well-being—happiness, enjoyment, sense of purpose, self-expression, self-worth, self-confidence
- mental challenge—keeping learning, aids memory, doing new things, connections with the past, challenging stereotypes, shared heritage

- social connection—socialising, connecting with like-minded people, being part of something, friendship, peer support, feeling like a family, bringing joy to others, avoiding loneliness and isolation

The UK charity *Sing for Life* has developed and run community singing groups, known as Silver Song Clubs, for older people since its inception in 2005. Recently, they have innovated with the introduction of technology—the Silver Song Music Box—to assist with the delivery of singing programmes. This allows for flexibility in the delivery of music and lyrics to support singing through modulation of key and tempo to suit the singing group. At an early stage in the work of *Sing for Your Life* Silver Song Clubs, were evaluated by researchers from the Sidney de Haan Research Centre. The initial evaluation sought to identify the key characteristics and processes of a club (Skingley and Bungay 2010). Participants valued the opportunity to sing with others, and liked the organisation of the clubs. The principal benefits for participants closely reflect the themes emerging from the work of Southcott and colleagues: physical improvement, enjoyment, promotion of well-being and mental health, cognitive stimulation and social interaction.

Teater and Baldwin (2014) evaluated the UK *Golden Oldies* community singing programme in the context of considering the idea of successful ageing. Participants reported in questionnaires that the sessions contributed to their self-development and sense of community, as well as revealing an increase in self-reported health since engaging in the programme. Interviews with five members of the singing groups revealed three main benefits: reduced social isolation and increased social contact, helped participants deal with challenges in their lives, and offered a meaningful and enjoyable activity.

Older People in Community Singing Groups Established for Research Purposes

Cohen et al. (2006, 2007) in the USA evaluated the health and well-being benefits of different forms of creative engagement for older people aged 65 and above. The research programme included a professionally led

choral group, which was followed over two years. Changes on a wide range of objective and standardised measures of health and service utilisation were compared with a similar but non-randomised control group not involved in singing. A range of positive findings emerged:

> The intervention group (chorale) reported a higher overall rating of physical health, fewer doctor's visits, less medication use, fewer instances of falls, and fewer other health problems than the comparison group. The intervention group also evidenced better morale and less loneliness than the comparison group. In terms of activity level, the comparison group experienced a significant decline in total number of activities, whereas the intervention group reported a trend towards increased activity. (Cohen et al. 2006, p. 726)

Findings continued to be positive after two years:

> Moreover, the actual improvement reported in general health and the sustained level of involvement in overall activities two years into the study, reflects the reduction in risk factors driving the need for long-term care, through continuing involvement in a high-quality participatory art program—in this case, in an ongoing choral group directed by a professional conductor. (Cohen et al. 2007, p. 20)

Coulton et al. (2015) report a recent British study on the effectiveness and cost effectiveness of community singing for mental health-related quality of life among people aged 60 and above. This study was the first fully randomised community control trial comparing weekly group singing with usual activities over three months, with follow up three months after the end of the intervention. Significant benefits in quality of life for the singers were found, including reduced levels of anxiety and depression at three months, and improved mental health-related quality of life at three months and six months follow up. Skingley et al. (2016) in a qualitative analysis of written accounts from participants found that community singing led to specific incremental benefits for physical, psychological, social and community well-being.

Older People Living with Health Challenges

A growing body of literature has explored the value of singing for older people with different health challenges. Three areas of particular interest have been the benefits of singing for people with respiratory illness, the contributions of singing for people with speech difficulties due to neurological factors and the benefits of singing for people affected by cancer. A further area of interest has been the value of singing for people with dementia in both community and care settings.

Respiratory Illness

To date, three small-scale controlled trials have examined the value of group singing for people with chronic obstructive pulmonary disease (COPD), with includes problems such as bronchitis and emphysema. These interventions took place in a clinical setting with a focus on singing instruction in small groups of patients with recommendations to practice at home between sessions. The studies were small and varied in the length and frequency of the singing intervention and the nature of the control condition. Bonilha et al. (2009), in Brazil, found small improvements in expiratory pressure following singing for COPD patients relative to a decrease in the control group. Improvements may reflect the muscle strengthening effects of singing. Bonilha et al. (2009) also report an increase in quality of life scores, but improvements were also found in the control group, with no significant difference between the groups. Lord et al. (2010, 2012) in two UK studies of singing for patients with COPD found significant improvements on the SF36 questionnaire physical health component scores for the singing groups relative to controls. Lord et al. (2010) also reported significant improvements in anxiety scores for the singing group using the Hospital Anxiety and Depression Scale (HADS) compared to the usual treatment control, but this finding was not confirmed in the later study. Qualitative feedback from patients in both studies indicates clear physical, psychological and social benefits from singing.

Morrison et al. (2013) worked with 106 patients with COPD, who joined one of six community singing groups which met weekly for nine

months and joined together for two combined performance events. This represented a maximum of 40 hours of group singing, which exceeds the input from any of the previous RCT studies. At follow up, a total of 71 participants remained in the study, and it was found that there were significant changes in standard spirometry measures following singing. These included the amount of air that could be forcibly expelled from the lungs in one second and in total. While the study did not have a comparison control group, this finding is encouraging as deterioration in these measures is generally found over time. There was also a significant improvement on a validated COPD measure (the St. George's Respiratory Questionnaire), which indicated improved self-assessed health status.

McNaughton et al. (2016, 2017) report a feasibility single group cohort study in New Zealand along similar lines to that undertaken by Morrison et al. (2013), particularly in evaluating a programme of singing over the course of one year. Participants with COPD were assessed at baseline, after four months and then again after one year, and a significant reduction was found for the HADS anxiety score after one year replicating the finding from the Lord et al. (2010) study. No improvements were found in lung function measures, but an increase did occur in walking distance, although this change probably reflected the fact that the group was also engaged in an exercise programme. Twelve participants took part in interviews about their experiences of singing and accounts confirmed many benefits for physical, mental and social well-being.

Recently, the British Lung Foundation (BLF 2017) has actively promoted the formation of 'Singing for Lung Health' groups across the UK. People with breathing difficulties in newly formed groups provided feedback after three months of singing. The main themes emerging were:

- Increased understanding of breathing techniques to reduce breathlessness and maintain optimal lung function
- Increased awareness of the benefits of singing for lung health and self-management
- Increased capacity for creative self-expression, self-confidence and quality of life, and reduced feelings of stress and anxiety
- Increased accessibility to services which are open and approachable

Comments from participants served to illustrate these themes and clearly overlap with the views of singers who are not affected by lung disease:

I can't wait for the next session, it's made such a difference to my breathing and reduced use of blue inhaler substantially

It has transformed my life. The breathing and relaxation techniques I use for singing I now use as preparation for any physical activity

Walking, especially uphill, is much easier for me now. I can walk further and for longer with little reliance on my inhaler now

It has lifted my depression and helped me be able to communicate with people

I was on anti-depressants, but I am now feeling much better and my GP is slowly stopping the dosage. I even wake up in the morning with a song in my head and ready to sing

The social effect, making friends with other people and the singing activities themselves—therapy that doesn't feel like therapy—rather a creative pastime

On balance, the available evidence suggests that regular group singing can have self-assessed health and well-being benefits for patients with COPD and other breathing difficulties. Qualitative evidence also points to psychological and social benefits.

Parkinson's Disease and Stroke

Di Benedetto et al. (2009) report a small-scale, uncontrolled study of choral singing for Parkinson's patients in Italy. The rationale was that group singing could be a cost-effective form of intervention to help improve speech quality. Twenty patients were recruited into the study, and over a period of five months participated in vocal exercises and choral singing. Significant improvements were found in maximum phonation time as was quality of prosody and reduced fatigue. In addition, improvements were found in respiratory variables measured by standard spirometry, including increases in maximal inspiratory and expiratory pressures

(confirming findings from studies with patients with COPD that singing can help with lung function). While the study was small and uncontrolled, these findings indicate that singing may be useful for people with Parkinson's in maintaining speech quality. In addition, it is clear that the activity was highly valued in contributing to overall well-being and quality of life. This is convincingly demonstrated by the fact that the choral group formed for research purposes continued to meet after the study and gained new members. The 'Corale Gioconda' went on to give many public performances.

In a further study in the UK, Evans et al. (2012) investigated whether group singing lessons provided by a professional singing teacher can provide an effective means of improving and maintaining voice dynamics for people with Parkinson's disease and possibly also improve quality of life. The study was undertaken by recruiting people with a diagnosis of Parkinson's with voice problems and inviting them to attend a two-hour singing session every fortnight for two years. It was expected that singing would provide benefit to all four main parameters of speech: respiration, phonation, movement of facial musculature and articulation. It was also possible that the group sessions would provide support and an element of fun and thereby improve quality of life. This was assessed using a validated measure of quality of life for people with Parkinson's. Assessments over the two years of the study showed small but statistically significant improvements in the laryngeal elements of the Frenchay Dysarthria Score. Participants also reported a feeling of improved communication, which was reflected to a small degree in the quality of life questionnaire. While small in scale and uncontrolled, this study has the strength of following Parkinson's patients over two years and finding some evidence of improvements when, everything being equal, deterioration in voice quality might be expected.

Buetow et al. (2014) provide a valuable theoretical discussion of two factors, 'connectedness' and 'flow', that might underpin the value of group singing for people with Parkinson's. These ideas are further tested out in an empirical study by some of the same authors. Fogg-Rogers et al. (2016) considered the value of group singing for people with experience of stroke or living with Parkinson's disease. They note that both groups experience reduced mood, social participation and quality of life due to their conditions and that communication difficulties affect

90% of people with Parkinson's and over a third of people with stroke. Their aim in this small qualitative study was to explore the experiences of people with stroke or Parkinson's participating in choral singing therapy and identifying any factors that influence their involvement. Eight people recovering from stroke and six with Parkinson's were recruited from a community music therapy choir. Feedback was also gathered from relatives of the participants affected by these conditions. Semi-structured interviews were conducted and thematic analysis revealed that many participants had unmet needs associated with their condition, which motivated them to engage in singing as a self-management strategy. Group singing was described as an enjoyable social activity and participation was perceived as improving mood, language, breathing and voice.

Parkinson's UK, as a national charity, has also helped to promote the value of singing for people affected by this condition. Their website provides guidance on setting up singing groups and gives details of groups running throughout the country. One of the earliest singing groups for Parkinson's, 'Sing for Joy', was established in 2003 and is still thriving. 'Sing to Beat Parkinson's' is a further well-established initiative in the UK, delivered by the Canterbury Cantata Trust.

People Affected by Cancer

As with singing for lung health and singing for Parkinson's, considerable interest has developed in the value of singing for people affected directly and indirectly by cancer, through the work of the Welsh cancer charity *Tenovus*. Their programmes have demonstrated significant psychological and social benefits, but also that crucial bio-markers that underpin not only feelings of well-being and relaxation but also markers of immune system activity, were improved.

Fancourt et al. (2016) showed that group singing can significantly reduce stress, improve mood and reduce cortisol, beta-endorphin and oxytocin levels in cancer patients. In a multi-centre, single-arm preliminary study—the first of its kind—the researchers worked with participants from the 18 Tenovus choirs of over 1000 people affected by cancer

in South Wales. Some 251 volunteered and 193 were screened as suitable. No participant was being treated with chemotherapy or radiotherapy at the time or was on immunosuppressive medication. Participants comprised carers (72 in total), bereaved carers (66) and patients (55). They were mainly white females with average levels of well-being, but with social resilience scores lower than the average population. There were no significant differences in mood at baseline between the three groups. Previous studies with these choirs have shown that long-term involvement has reduced levels of anxiety and depression and an improved quality of life. The team wanted to compare changes across time in the three groups and see if they differed to understand whether singing was of value for any particular group.

In all five centres and participants groups the results were positive. This demonstrates that singing is associated with a decrease in cortisol and an increase in cytokine activity, possibly because the reduction in cortisol after singing reduced glucocorticoid suppression of the immune system, leading to general activation of the cytokine network and increased immune activity. There were no significant differences between the three groups (individual or aggregate) on measures of mood, stress or connectedness. Mood was particularly found to increase for those who had lower mental well-being, and patients and carers (who also had the highest levels of depression) experienced the greatest short-term improvement in mood across the singing session. Larger mood changes were also associated with a lower pro-inflammatory response, which appeared to be independent of stress levels.

Singing and Dementia

A growing body of research has focused on the value of group singing for people with dementia or Alzheimer's disease. A remarkable aspect of this work is the demonstration that even with quite advanced dementia, the people affected can continue to engage with music and singing and find pleasure from the activity. Singing is also something that partners and family members can participate in along with their loved ones.

People with Dementia in Communities

The idea that singing groups could aid those affected by dementia was developed in the UK by Chreanne Montgomery-Smith of East Berkshire Alzheimer's Society branch. 'Singing for the Brain' groups developed across the UK, supported by the Alzheimer's Society charity. Bannan and Montgomery-Smith (2008) reported on an exploratory process study of three of these group singing sessions for people with Alzheimer's in a community setting. People with Alzheimer's were accompanied by family carers, and the sessions were led by a musician rather than a music therapist. Benefits observed among participants included being better able to communicate, having a stronger voice after singing, and having improved memory recall. It was also clear that the participants with Alzheimer's were able to learn and perform a new song. The study is important as it contributed towards the national Alzheimer's Society promoting this initiative across the country.

A more recent evaluation of 'Singing for the Brain' is reported by Osman et al. (2014). As well as enjoying the sessions, participants found that attendance helped in accepting and coping with dementia. Ward and Parkes (2015) report a further small-scale qualitative evaluation of a pilot for people with a learning disability and memory problems or dementia. A high level of enjoyment and engagement with the sessions was found, which supported easier communication and social engagement.

Camic et al. (2013) also found that people with dementia and their carers had high engagement levels in the singing groups they established, and quality of life remained relatively stable. Qualitative data showed clearly that singing promoted well-being for all participants. For the person with dementia, participation in a singing group challenged their own beliefs about not being able to sing and no longer fitting into 'normal' activities. They were able to take risks in learning new songs, rhythms and movements in a socially inclusive environment. It challenged the commonly held belief that people with dementia are not capable of taking on new activities. The social experience of group singing with people experiencing similar problems was important. There were high levels of enthusiasm and the atmosphere of the group and skills of the music facilitator helped people to feel safe and valued.

People with Dementia in Care Settings

Lesta and Petocz (2006) working in an Australian care home setting, noted a marked improvement in mood and social behaviour for people with dementia after participation in group singing programmes to aid 'sundowning' (a period of disorientation and/or agitation as it becomes darker at the end of the day). A music therapist facilitated the singing of familiar songs over four consecutive days with four elderly female care home residents (aged 80–97 years with mid-stage dementia). There was discussion and focused pauses between songs to increase participation and promote security. A gentle farewell song brought the session to a structured close, and the residents were individually thanked for coming. The report marked improvement in participants sitting and walking together, giving one another repeated eye contact, moving to the music, as well as reminiscing with one another. There was also a significant decrease in non-social behaviour, such as participants actively mumbling, sitting or wandering alone, as well as continuously touching their face or clothing. This study demonstrates the power of singing to assist in a very specific challenge associated with caring for people with dementia due to fading light in the evenings.

Svansdottir and Snaedal (2006) report a case-control study of group singing and dementia in two nursing homes and two psycho-geriatric wards in Iceland. In total, 46 patients (71–87 years) with moderate to severe dementia and a range of behavioural and psychological symptoms were recruited and randomised to a music therapy or control group. Three or four patients participated in each session. A collection of familiar songs were selected by the music therapist and used throughout the study. Those patients not actively participating sat with the others holding the songbook and listening. In that way, every patient participated actively or passively, including patients in different stages of dementia in the same sessions. In between the songs, the patients chatted, and they also used instruments, hesitantly at first, and sometimes the patients had an urge to move and dance with the music. After six weeks, scores on a combination of three of the seven rating scales (activity disturbance, aggressiveness and anxiety) showed a significant reduction in the therapy group, but not the control group.

Myskja and Nord (2008) report a study on music and depression in an Oslo nursing home. Residents had had a music therapist conduct group singing activities with them for four years, but the service was withdrawn for almost three months after which the singing group resumed as before. Assessments of depression were made by nurses before the singing group was restarted and after two months of singing and significant improvements were observed. Level of engagement in the singing activity was also associated with the degree of improvement.

The studies reviewed so far provide an encouraging picture of benefits associated with group singing for people with dementia. However, more robust efforts to evaluate the benefits of singing for people with dementia, especially in comparison with alternative interventions, provide a more qualified picture. Cooke et al. (2010a, b), for example, report a randomised controlled, cross-over trial (a music intervention and a reading control group) undertaken with participants from two aged-care facilities in Australia providing low and high nursing care. The participants suffered from early to mid-stage dementia with documented behavioural issues/agitation. The majority were female aged 75 and above. Many had other illnesses or were visually impaired, and wheelchair bound. They were randomly allocated into two groups: the first in a programme of singing activity followed by a programme of reading, and the second in reverse. Both groups ran for 40 minutes, three mornings a week for eight weeks. A five-week gap followed and then a reversal of the groups took place for a further eight week period.

The conclusions drawn provide a salutary counter-balance to the general tenor of this review that singing interventions for older people are positive. It found that participation in singing did not significantly affect agitation and anxiety in older people with dementia, and there was no evidence to indicate that the music programme was any more effective than the group reading activity (Cooke et al. 2010a). Likewise, participation did not significantly affect levels of depression and quality of life in older people with dementia. The results suggest that both group activities offered opportunities to improve sense of belonging, self-esteem and depressive symptoms in some older people with dementia (Cooke et al. 2010b).

This study showed that singing interventions do not necessarily lead to beneficial outcomes, nor are they always more effective in general than

other forms of group activity. Taken together, these principles suggest the need for flexibility in the provision of musical, creative activities and other forms of engagement which are sensitive to the circumstances, interests and health of each individual.

More recent studies, however, continue to provide evidence of positive benefits from singing. Dassa and Amir (2014) found that singing familiar songs elicited significant memories for people with dementia in middle to late stages of the illness. Although there were only six participants studied over one month, conversations relating to the singing became extensive and spontaneous in response to the group singing experience. Furthermore, the group members expressed positive feelings after each singing session, with an increased sense of accomplishment and belonging. The researchers concluded that conversations can be facilitated more effectively when the group leader selects songs that are relevant to the earlier lives of participants. Singing served to strengthen the deteriorating capacity of spontaneous speech that is often prevalent in middle to late stage Alzheimer's.

Clements-Cortes (2013, 2014, 2015a, b) reports three studies based on the Buddy's Glee Club project at the Bay Crest Hospital Community Day Care programme in Toronto, Canada. In the first phase of the study, 28 older people with dementia attended a weekly singing group for 16 weeks. Qualitative evidence identifies five broad themes of perceived benefits: friendship and companionship, ease of engagement, feelings of happiness and being uplifted, feelings of relaxation and reduced anxiety and fun. In this respect, the findings are similar to earlier studies of perceived effects and benefits of choral singing (e.g., Clift and Hancox 2001, 2010).

A second phase study (2014) involved participants from a long-term care home engaged in weekly music therapist-led group singing over 16 weeks. Participants varied with both 'cognitively intact' and 'cognitively impaired' residents taking part. The programme objective was for participants to discover and experience the joy of singing. Overall, average weekly pre- and post-session scores for happiness and mood, energy, pain and anxiety showed positive changes for all or most of the 16 sessions. In addition, highly positive, qualitative feedback was gathered.

> The choir experience helped participants gain a sense of community and a sense of purpose; it increased their confidence, mood, energy, and alertness;

> and it established a positive climate. Participants frequently commented on their love of singing, and they reminisced about their time spent in choirs during their youth and adult lives. Singing in the choir provided participants with a chance to interact socially with others, participate fully, and contribute to group goals as well as facilitating special moments during the weekly sessions and during performances. (2014, p. 101)

In the third phase of the study participants were again residents in a long-term care home with mild to moderate cognitive impairment or Alzheimer's. As with the 2014 study, the group was offered the opportunity to perform. A further feature of this phase, however, is that the 35 participants engaged in the singing programme represented three different groups: residents in long-term care with mild to moderate dementia, significant others of the residents and other people directly involved in setting up and running the activity. This diversity is an important feature and reflects the arrangement evaluated by Bannan and Montgomery-Smith (2008). Assessment measures for groups one (residents) and two (others) focused on changes in pain, mood and energy from start to finish and group two completed questionnaires at the three points and were interviewed on perceived benefits of the choir for both themselves and residents at the end. Group three (study staff) were interviewed post-study on the overall experience and perceived benefits of choir participation. They found statistically significant reduced perceptions of pain over the study for residents and their carers (more so in group one than two), and increased energy and mood for both residents and significant others.

Särkämö et al. (2015) found that caregiver-implemented musical leisure activities, particularly singing, were cognitively and emotionally beneficial especially in the early stages of dementia. Singing was found to be beneficial for working memory, executive function and orientation, especially in persons with mild dementia and younger (under 80 years) age, whereas music listening was associated with cognitive benefits only in persons with a more advanced level of dementia. Both singing and music listening were more effective in alleviating depression, especially in persons with mild, Alzheimer-type dementia. Särkämö et al. (2015) concluded that musical leisure activities could easily be applied and widely

used in dementia care and rehabilitation. Especially stimulating and engaging activities such as singing seem to be very promising for maintaining memory functioning in the early stages of dementia.

Ahessy (2016) studied 40 residents in both residential and day care who took part in a music therapy choir in a randomised control trial. He found that depressive symptoms in the singing group were reduced, mean quality of life score improved, and there was a statistically significant increase in cognitive functioning. All 20 participants in the treatment group felt that singing was good for them, and attributed their positive feelings to the choir; half said that these feelings lasted all day, and some for a week or more. Participation in the choir made them feel part of the community, improved their mood and made them feel valued, giving purpose to their lives. Interestingly, participants chose to learn new songs and felt that this was the main benefit of the choir. This demonstrates that older adults are still eager to learn new skills and that novelty keeps their lives purposeful and meaningful. The second most perceived benefit of the choir was social interaction. The large majority of the sample were female and reported loneliness and isolation as issues affecting their health. The study concluded that a music therapist-led choir was an effective psychosocial intervention for reducing depression and improving quality of life in older adults. The study demonstrates that singing can have a very positive role to play in helping those who suffer from dementia and Alzheimer's to have a better quality of life and live more harmoniously with fellow residents and carers.

Finally, a further note of caution comes from a recent German study that compared a music therapy intervention with group singing on depression levels of residents in a nursing home in a pragmatic, two-armed, cluster randomised, controlled study. Werner et al. (2015) studied 117 participants grouped into four clusters who were randomised to interactive music therapy or recreational group singing. During the first five weeks depressive symptoms decreased in the music therapy group, but increased in the singing group. Again after 10 weeks of intervention, depressive symptoms decreased in the music therapy group and increased in group singing. The results suggest that music therapy decreases depressive symptoms in elderly people in nursing homes more effectively than recreational singing.

Conclusion

Research on the health and well-being benefits of singing has grown considerably since the beginning of this century and an early pilot study by Clift and Hancox (2001), and much of this literature has focused on the value of singing for older and elderly people. Studies have been conducted throughout the world with different population groups in both community and care settings, and with people affected by a variety of different health conditions. Early studies tended to be small in scale with a qualitative focus, but increasingly more robust, larger controlled trials have been undertaken showing clearly that singing can have measurable health-related outcomes. Some caution is signalled by recent studies that singing is not unique in this respect, and other musical activities, and indeed a range of recreational and leisure activities may have similar or greater benefits. A factor of personal choice must always be taken into consideration too, for some people singing may simply be something they would rather not engage in. Nevertheless, for those who wish to take part, singing is an engaging physical activity which involves light to moderate exercise, especially of the respiratory system. It is cognitively challenging and involves learning where new material is introduced or singing is in two or more parts. It is also enjoyable, meaningful and emotionally uplifting. Finally, in groups, it involves social interaction and coordination and can generate feelings of belonging and social support. In line with the World Health Organisation's (1946/2006) definition of health, cited at the start of the chapter, singing has the potential to promote 'physical, mental and social well-being' in a positive and holistic way.

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Community Music Research and Evaluation Through a Social Determinants Lens

Naomi Sunderland, Lauren Istvandity, Ali Lakhani, and Caroline Lenette

Introduction

Our chapter explores the relevance of an existing health equity and social determinants of health (SDOH) framework (see Schulz and Northridge 2004) for both researching and evaluating health and well-being outcomes

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for participatory music programmes. There is an increasing focus on how arts activities such as song writing, recording and music performance can contribute to health and well-being for marginalised groups while achieving broader health equity and social justice outcomes (see e.g. Harrison 2013; Pavlicevic and Ansdell 2004). Extending on the work of Wiggins et al. (2013) and others (see e.g. Harrison 2013; Parkinson and White 2013), we see music participation as an activity that can act as a positive SDOH in and of itself (see e.g. Batt-Rawden 2010) and as an activity that can affect the social conditions that shape health and well-being (see e.g. Harrison 2013; MacDonald et al. 2012; Parkinson and White 2013). Within this context, we draw on our experiences of research with refugee and asylum seeker participants in the Brisbane-based *Scattered People* (2015) music programme (see http://www.scatteredpeople.com) to enrich discussions on community music research and evaluation.

Music and the Social Determinants of Health and Well-Being

While it is currently difficult to find published music research outside of this book that overtly adopts an SDOH approach, practitioners and researchers in the broader field of arts and health do acknowledge the importance of social determinants of health and the role of the arts in addressing health inequalities (see e.g. White 2009; Parkinson and White 2013), as well as the impact of community-based arts programmes on public health (Sonke and Lee 2014). There have been promising developments in recognising the contribution that music participation can have on social determinants of health such as poverty. Harrison (2013), for example, conducted research in Vancouver, Canada, that explores how "musical offerings … address issues of poverty, including lack of health" (p. 58). She explored in particular how music participation could affect highly significant determinants of health and well-being by developing:

> the skills, education levels, incomes, and occupational possibilities of participants living in material poverty, which in turn can enhance their socio-economic status, a social determinant of human health and mortality. (Harrison 2013, p. 58)

The 2013 Australian Government *National Arts and Health Framework* also acknowledges—albeit in a minimal way—that arts initiatives generally can have an "impact on the determinants of ill-health by changing individuals' attitudes to health risks and supporting community resilience" (Standing Council on Health and the Meeting of Cultural Ministers 2013, p. 2). While the Framework identifies individual attitudes and risks and community resilience as "determinants of ill health", Clift acknowledges broader determinants related to arts practice such as access to cultural capital (2012, p. 121). Putland et al. (2013) echo this idea and note the increased access to social capital via community arts and cultural programmes. Parkinson and White (2013) have also discussed that the strength and nature of local cultural engagement is a key determinant of health and well-being. This mirrors studies with Aboriginal and Torres Strait Islander peoples in Australia, which show the direct link between strong cultural practices and enhanced outcomes across a range of socio-economic and health and well-being outcomes (Dockery 2010).

Furthermore, Parkinson and White (2013) emphasise that the arts have an international role to play in supporting strong healthy cultures and promoting health equity and well-being. Drawing on key health promotion documents such as the World Health Organization's (WHO) *Declaration of Alma Ata* (1978) and the 1981 *Global Strategy for Health for All by the Year 2000*, Parkinson and White (2013) advocate for culture and the arts as a key determinant of health and well-being. Similarly, Edge et al. (2014) note the importance of music and arts programmes, among other social and cultural activities, as a factor in mediating the health and well-being of refugee youth.

Using an SDOH approach, Davies et al. (2014) developed a framework to further understand the connection between arts engagement and population health to make the framework relevant to a wide range of health professionals, researchers and policymakers. This framework is constructed from a study of 33 Australian adults and incorporates a selection of health determinants and health outcomes. The authors list potential confounders and effect-modifiers that they believe will help to "avoid spurious conclusions about the health-arts relationship" (Davies et al. 2014, p. 8). In another instance of broad arts and health framework development, Fancourt and Joss (2015) formulated the concept of *Aesop*

1, which encompasses six stages through the lifecycle of an arts intervention, from development to implementation. While this is principally concerned with providing a useful synthesis of relevant but competing methodologies for arts and health researchers, it advocates for the consideration of social health outcomes as part of the evaluation phase.

Schulz and Northridge (2004) SDOH Conceptual Framework

We have previously used Schulz and Northridge's (2004) comprehensive SDOH framework as a basis for research with the Scattered People asylum seeker and refugee music programme. The framework is reproduced in its original form below (see Fig. 1). Schulz and Northridge (2004, p. 456) describe their work as a "conceptual framework for understanding the implications of social inequalities for environmental health [that] emphasizes the interplay of social processes with features of the physical environment". Hence the model adopts an explicit health equity focus. The model "outlines the multiple and dynamic pathways through which underlying social, political, and economic conditions influence aspects of the environment, thereby affecting individual and population health and well-being" (ibid.).

We selected Schulz and Northridge's (2004) framework primarily due to the detailed way that it maps social and environmental determinants of health at different levels of the social-ecology (see Levins and Lopez 1999) of health and well-being. Our use of the framework also extended on previous collaborative place-based health promotion research conducted by the project leader (see Sunderland et al. 2012; Kendall et al. 2012). We favoured the Schulz and Northridge framework for this research in particular, due to its overt and detailed recognition of human rights, ideologies and racism as significant factors that shape health and well-being outcomes. We argue that the recognition of such factors is particularly relevant when working with intensely marginalised, politicised and stigmatised groups such as refugees and asylum seekers in Australia and other resettlement countries.

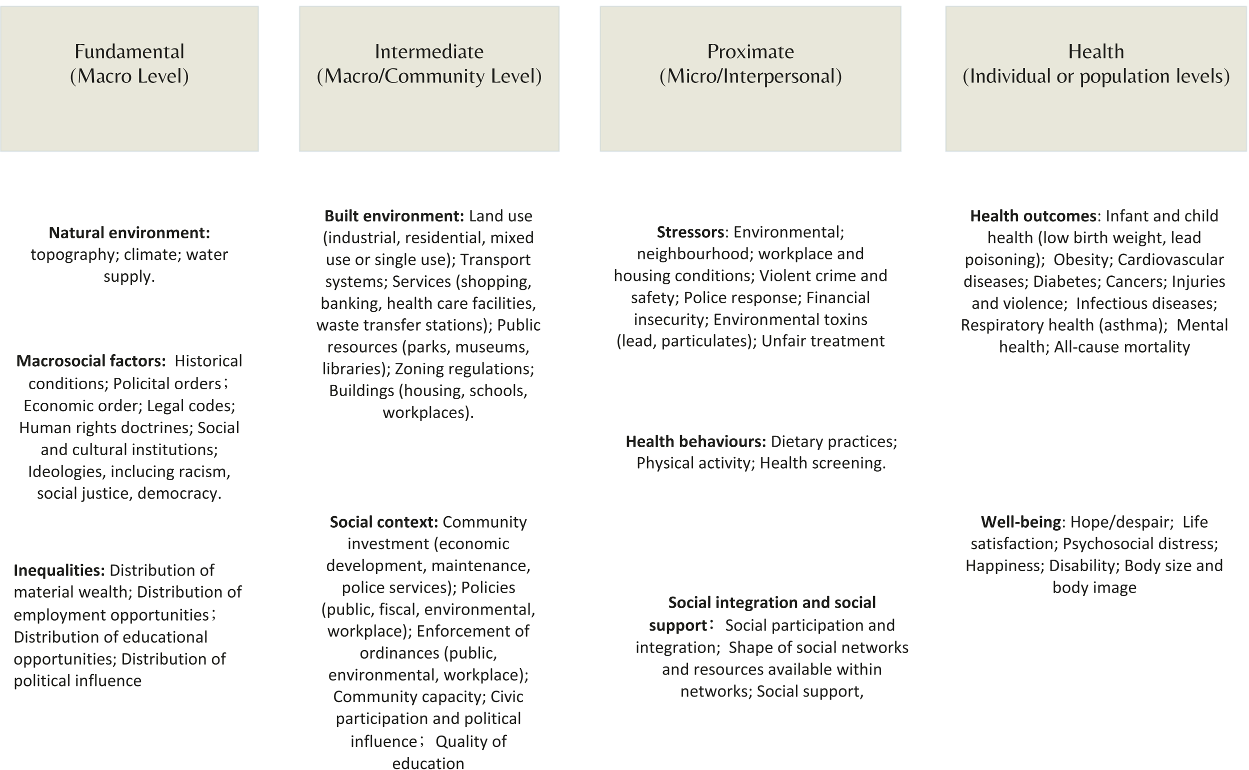

Fig. 1 Adapted from Schulz and Northridge's (2004) social and environmental determinants of health framework

We did not substantially amend or adapt Schulz and Northridge's (2004) framework in our original research project. We make some recommendations in this regard, however, in this chapter and suggest adaptations for music, health and well-being research.

Key Learnings: Applying an Existing SDOH Framework to Complex Community Music Making

Reported Health and Well-Being Outcomes That Did Not Fit Neatly on the Existing SDOH Continuum

While many themes arising from participant interviews fit neatly onto the SDOH framework, we also identified a number of factors that were reported as contributing directly and indirectly to participants' health and well-being that sit *outside* this model. Specifically, these outcomes related to aspects of (1) cultural expression, (2) music making and (3) consolidation of personal and social identity (see Sunderland et al. 2012 for a full discussion). These factors are interrelated, with each impacting on the others in relation to well-being outcomes for participants. Thus, consideration of these three aspects that are broadly related to artistic and cultural influences, can contribute to broadening current understandings of SDOH and well-being.

Cultural Expression

In the Scattered People sessions, participants were encouraged to share aspects of their own culture, while also participating in musical activities from other cultures. Several of the participants emphasised the role of both first and second or even third languages, including English, in making music within the group. Being able to sing in one's first language afforded individuals the opportunity to express not only aspects of their culture but also an articulation of their thoughts and feelings. So too did this experience allow participants to hear and sing in their own

language—a practice which may be difficult to maintain in a resettlement setting. One participant described an example of this:

> [J] also enjoyed hearing songs in Persian, maybe more than in English. … [J] said he would not sing Persian songs otherwise and he would not sing them at home. He also said that he doesn't hear Persian songs anywhere else in Brisbane. (J & T's story)

Musical expression in first or familiar languages appeared to be an important contributor to the well-being of this culturally diverse group. As one participant, Joy, noted, "when people can sing in their 'mother language' it creates happiness". Joy goes on to describe the importance of acknowledging individual languages in the coming together of many different cultures at the Scattered People sessions (Joy's story). In this way, participants in the programme were able to connect with and maintain a sense of individuality within the culturally based plurality among participants.

Music Making

On the other hand, the idea of participating in musical activities in the absence of proficient English language skills was at first daunting for some participants. As explained by S:

> I always think you should speak very well English to connect to people, but I saw many people, they try to speak slowly to me … I was so excited. … It was really good. They push for me, hey, [S], sing! (S)

An initial perceived language barrier was soon overcome for S when it became apparent that there were many people speaking different languages and from diverse culture groups present, yet all participants had gathered for the one common purpose—to share music. Another participant, Z, echoed S's sentiment and said:

> Always music can explain … there are lots of languages in the world. The music and song or poetry could be one of those [languages] which could

> transfer people's feelings and emotion to other people. So we kind of speak to [the] world [through] the music. (Z)

Z is alluding to how music has the ability to communicate emotions regardless of the language of any lyrics, as well as the ability for Scattered People participants to perceive this emotion.

For these participants, music allowed a connection that did not require a common spoken language. S explained, "music is an international language for every people, for all of us" (S & Z interview). While cultural differences were acknowledged and indeed celebrated within the group, participants also recognised the shared function of music making for all those present. In the context of the sessions, music was used for an expression of self, an expression of trauma and grief. As stated earlier in this chapter, music making became an avenue to build social bonds. Indeed, this activity was emphasised by participants as being integral to their well-being and was recognised as a quick and effective method for connecting with others. For example, J described that meeting people through Scattered People was very important to him, stating that he thought it would not be as easy to connect with people through other activities (J's story). S also expressed how the welcoming nature of the group and the inclusiveness of the musical activities made her feel "excited", while Z described the group as "part of our family" (S & Z interview). In these ways, music comprised a universal function to this diverse group and contributed to positive well-being outcomes for participants.

Consolidation of Personal and Social Identity

Participants frequently described music as having an effect on their mental well-being. Specifically, they noted feelings of happiness or relief, but in speaking about their relationship with music, they also referred to concepts of identity and agency. Closely related to the ideas of expression and communication discussed above, "self and social identity" as a concept appears to contribute greatly to health and well-being outcomes, yet it too is absent from the SDOH continuum. Nevertheless, individuals felt

excited, happy and proud to sing songs in their own language, indicating elements of strong self-identity. Similarly, music gave participants a certain freedom of expression that they may not have had before. For example, S described how women were not allowed to sing in her home country, but that being able to sing in her new country gave her a sense of agency, and a feeling that she may be able to change the world around her through music (S & Z interview).

It also appears that participants retained part of their ethnic identity, especially through language, but also created a new, shared social identity with other people in similar circumstances. For example, Joy described his ideal scenario on putting together a musical concert with other participants, "if we have five songs for example, three should be for the refugees [i.e. in refugee languages] and two for the audience [i.e., in English]" (Joy's story). This split between "songs for refugees" and "songs for the audience" can be understood as a representation of integrated identity within this particular group. Thus, in the context of the Scattered People sessions, participants were creating a shared identity through the unified function of music for the group, as an avenue of expression, communication and reception of thoughts, feelings and stories. Music making activities can therefore positively contribute to a sense of well-being for participants through the promotion of music as part of personal and social identity.

The Need to Adapt Existing SDOH Models for Community Music Making Research and Evaluation

The above discussion highlights that the themes emerging from participant interviews surrounding cultural expression, music making and consolidation of personal and social identity do not integrate into the SDOH framework in its current form. However, as the discussion also suggests, they all played a key role in the achievement of health and well-being outcomes as identified by participants. This finding indicates a gap in the recognition of the position of artistic and cultural influences in terms of both health and well-being interventions. This gap is especially glaring within the context of culturally and linguistically diverse target groups, in

which, as shown, cultural identity is one of the few aspects that individuals carry with them into new societies. More attention should thus be paid to these aspects as important determinants of well-being that can be highlighted through interdisciplinary research.

While absent from the model used within this study, recent Indigenous specific SDOH frameworks have included cultural expression and/or cultural identity as health determinants. For example, the 2009 National Collaborating Centre for Aboriginal Health [NCCAH] report, *Health Inequalities and Social Determinants of Aboriginal Peoples Health* includes Cultural Continuity—generally defined as having a strong understanding of history, language and culture—as an intermediate determinant of Indigenous health. Similarly, the 2013 Assembly of First Nations [AFN], *A Transitional Discussion Document on the Social Determinants of Health* (hereafter the Discussion Document) includes Language, Heritage and Strong Cultural Identity as a determinant of Indigenous health. The Discussion Document clarifies that for Indigenous people: "[a] positive and balanced state of well-being cannot be achieved unless individuals, families, and communities are supported to openly express their cultural identity" (p. 16). The two referenced SDOH frameworks affirm the notion that cultural identity is an important health determinant among Indigenous people. Given that cultural expression and identity contributed to the health and well-being of culturally and linguistically diverse participants within this study, there is a strong argument towards also including cultural expression and identity as a determinant within SDOH models for culturally and linguistically diverse groups, newcomers and refugees and asylum seekers.

The prominence of the three themes—cultural expression, music making and consolidation of personal and social identity—in the literature indicates their importance, and provides an impetus for more critical discussions from an SDOH perspective. For instance, the complexity in "measuring" happiness and well-being across cultures remains an important theme, as does the critical role of interdisciplinary research to address this issue (Mathews 2012). Moreover, the notion that music comprises traits that are understood within all cultures was initially proposed within early studies of ethnomusicology in the nineteenth century. Throughout the twentieth century, the debate as to whether music could really be

considered universal to all cultures continued, spurred on by theories of human evolution, linguistic development and greater philosophy on music (e.g. Harwood 1976; Hood 1977; Merriam 1964). These trends highlight the social nature of human existence and the function of music therein.

Furthermore, research in the area of music sociology has shown clear connections between music activities, such as sharing, listening and music making and the formation and consolidation of personal and social identity such that music can become representational of the self (see for instance, Bennett 2000; Cohen 1991; DeNora 2000; Frith 1981, 1996; Hesmondhalgh 2008). While concepts of music-related identity and well-being in culturally and linguistically diverse groups are currently under researched, the limited evidence suggests that self and social identity in ethnic communities can be positively related to psychological well-being (e.g. Liebkind and Jasinskaja-Lahti 2000; Liebkind 1992; Nesdale et al. 1997; Phinney and Kohatsu 1997; Phinney et al. 2001). Other studies indicate that a shared social identity within minority groups can also have positive well-being effects (Haslam et al. 2009; Reicher and Haslam 2006). The findings outlined in this chapter also align with these ideas.

Thus, designing a new SDOH framework based on the Schulz and Northridge (2004) model, but encompassing other more relevant aspects to culturally diverse groups in the context of arts-based research may provide a more accurate picture of health and well-being outcomes in interdisciplinary contexts. This adapted framework could then be tested through another set of interviews with the same participants using a slightly different line of questioning that would focus on those themes identified here as external to current SDOH framework. The outcome would be that collaborative, interdisciplinary and participatory-based research, as described in this chapter, could then yield clearer indications of the importance of arts in achieving positive well-being outcomes for refugees and asylum seekers and other marginalised groups.

Our final advice to other researchers entering this area is to carefully consider the complexity of arts-health research and approach collaborations with something akin to intercultural work. We found that common interests were effective in linking researchers across disciplines and repre-

sented a valued opportunity to learn from and contribute to different perspectives. Factors that contributed to productive interdisciplinary processes for us included collegiality and a common objective, respect for and openness towards diverse standpoints, listening and responding to all input and convergence during the analysis phase. Aspects that were more difficult to reconcile included differences in discipline-specific "jargon" and writing styles, differing expectations about authorship and publications, experiences and expertise of researchers and (unsurprisingly) bridging the gap between quantitative-qualitative traditions. We see that these elements are akin to "culture shock" experienced in a new environment requiring adaptation and adjustments to ensure the benefits of interdisciplinary collaborative outweigh the difficulties and achieve the project aims.

Conclusion

Returning to Edge et al.'s (2014) point on the importance of music programmes as a factor in mediating health and well-being, our chapter shows the great potential for interdisciplinary research and evaluation to enrich knowledge across those fields. This chapter summarised our key learnings from applying a social determinants of health to a research evaluation of an existing community music activity. We found there to be both power and limitations in using an existing SDOH model. Future research should work on developing bespoke SDOH models that can attend to the specific work that is achieved in music and other art forms particularly with marginalised groups.

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'Being Here': Equity Through Musical Engagement with People with Dementia

Rineke Smilde

> I put my arms around my life
> Slowly embracing it
> I can visit the past
> but I can't live inside it
> that's OK—
> I can be here right now.

This quote is part of the beautiful poem *Being here*, which was written by a student of Prince Claus Conservatoire who took part in a project that we carried out in the autumn of 2015 in the city of Groningen.[1] In a day care centre for people living with dementia, music students engaged with the participants, consisting of people with dementia, their family members or spouses, and a number of volunteers. The students went regularly into the day care centre, connecting with the participants, and drew stories

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out of them, transforming them into poems, which they collaboratively set to music. They were guided by an artistic leader and coached by a professional text writer. During the four months of the project, an inclusive performance emerged that included theatrical elements. In the end, this performance took place in the day care centre, in the concert hall of the conservatoire, and at an elderly festival in the city of Groningen.

The idea of the project was to create a sustained practice that could continue to be developed. Two recently graduated students also took part; they were trained in entrepreneurship geared towards this project and practice with the goal to carry on with the project and develop it further. The learning processes of everyone involved were researched in order to gain information that would be transferable to similar contexts in dementia care.

A highlight of the project was the moment when the students took their completed texts to the day care centre and presented them to the participants, accompanied by music-making. For instance, the poem quoted at the beginning of this chapter was written for a couple who had loved to dance the tango in the past. A nostalgic, and at the same time 'light', tango composition supported the reading of the poem. Another poem related to a participant's metaphor of the brain as a book case where all the books had fallen out, except for the history book. It was impressive to notice participants' reactions to the various poems, like, 'That is it exactly!', and even, 'That's right, *that's us*!'

In the end, our research showed that the performances that took place were perceived and experienced by everyone involved as a collaborative artistic accomplishment, and gave both the participants of the day care centre and the musicians a great sense of empowerment. We found that what stood out in this project was, next to the musicians' learning and development, the mutual empowerment of musicians and participants alike. Here was a reciprocal and 'equal' process to be observed.

Equality as part of a collaborative artistic project in a social context, and equity as a result, are at the core of this chapter (see also Renshaw 2010; Higgins 2012). I will reflect on a strong example, consisting of the British project Music for Life, where musicians engage with people with dementia and their caregivers as a group, where focusing on the 'person behind the dementia' in a participatory artistic process can lead to

empowerment of the people with dementia whilst strengthening the relationships with their caregivers.

First, I will say some more about music and dementia in general. I will then briefly describe the project and, following that, focus on aspects of equity in this project, seen from the perspective of the musicians involved, using material from the research we conducted into this project (Smilde et al. 2014). This will be followed by a discussion.

Music and Dementia

According to the World Health Organization (2016), worldwide 47.5 million people are estimated to live with dementia, of which Alzheimer's disease is the most frequently occurring form. The number of people with dementia is increasing, and is estimated to reach 75.6 million by 2030 (ibid.). Even today, the picture painted of people living with dementia is often one of ultimate suffering, where the person with dementia would lack the capacity for well-being and self-awareness and lose their identity and capacity for learning (Smilde et al. 2014, p. 10). As gerontologist Tom Kitwood (1997) argues, 'the standard paradigm feeds into an extreme deterministic view, which can be summed up in the popular image of "the death that leaves the body behind"' (p. 37).

Where being diagnosed with dementia can be perceived in the society as 'being lost', the reality is that this is not necessarily the case. John Zeisel (2009) argues:

> 'What kind of future is it if people can't remember their children and where they are?' those who don't understand the disease ask. That question assumes that memories are gone, which they are not, they are just increasingly inaccessible without some help. It also assumes that the future is based in the past and in past memories. It is not. The future is based on many present moments – moments the person experiences fully every day and every minute. The future for people living with Alzheimer's promotes new relationships, quality of life, and joy. To see the future in this way requires us to realize that the person living with Alzheimer's is a new person with reference to the old person he always was. (p. 9)

There is growing evidence that the arts can have a significant role in promoting mental and physical health and general well-being of older people (Huhtinen-Hilden 2014), and in particular this relates to active music-making in a social context (Hallam et al. 2013). Zeisel (2009) points out that people living with dementia can learn and develop themselves, in particular in the field of the arts, where, '[t]he arts can provide meaning in what to many is experienced as an ever increasingly meaningless life. Art … gives meaning to life and it is meaning that people living with Alzheimer's so dearly crave' (p. 17). Music touches parts of the brain that link what we sense, know and feel, Zeisel (2009) argues, and the more someone is in touch with their feelings, the more that person can appreciate art. In addition, various arts are 'hardwired' in the brain and are thus often not lost in advanced stages of dementia (p. 72).

The neurologist Oliver Sacks (2008) addresses the relation between music and dementia in his famous book *Musicophilia, Tales of Music and the Brain*, and points out that in an advanced state of dementia aspects of self-awareness, in particular awareness of one's own incapabilities, can disappear. At the same time, even in advanced dementia, aspects of one's essential character, of personality and selfhood, survive, and identity is never wholly lost. The response to music, Sacks (2008) observes, is particularly preserved (p. 372).

Emotional memory in the brain can be activated by music and the instinctual abilities of understanding music are not lost in advanced dementia. Music can underpin the creation of new relationships, an increased quality of life, and the self-esteem of people with dementia, and it can ease depression, aggression, and irritability (Kitwood 1997; Garrett 2009; Zeisel 2009).

Sacks (2008) focuses in his writing in particular on music therapy and describes astonishing reactions of people with dementia to music (p. 380). He points out that familiar music can give people access to moods and memories, thoughts and worlds that were completely lost. He also mentions the fact that nursing staff can see people with dementia in another light, 'as people who have had a past … with joy and delight in it' (p. 381). Elsewhere, however, he writes that 'music does not have to be familiar to exert its emotional power' and argues that there is always 'a self to be called upon, even if music, and only music, can do the calling' (p. 385).

This resonates with Kitwood's (1997) definition of personhood as 'a standing or status that is bestowed upon one human being, by others, in the context of relationship and social being' (p. 8). He adds that 'it implies recognition, respect and trust' (Kitwood 1997, p. 8). Kitwood (1997) suggests that it is essential to regard personhood in terms of relationships in order to understand dementia: 'Even when cognitive impairment is very severe, an I-Thou form of meeting and relating is often possible' (p. 12). He describes person-centred care, which builds on the main psychological needs of people with dementia. They are comfort (tenderness, security, and warmth), attachment (responding to the instinct-like needs of forming human bonds), inclusion (understanding the need to be part of a group), occupation (helping to be involved in a process that is personally significant), and identity (supporting the feeling of knowing who one is. (Kitwood 1997, p. 82).

Exactly these values mentioned by Kitwood are central to the project Music for Life of Wigmore Hall in London. At the core of this project is the aim to make the *person behind the dementia*, someone's 'personhood', visible again. Sacks' observation of care staff who may see residents in a new light is corroborated in the practice of Music for Life; through engagement with residents in musical interaction and observing their reactions, caregivers can change their view on the people in their care, becoming more and more aware that the residents have a biography.

In one of the Music for Life workshops which I observed, there was a woman with advanced dementia who created a piece of music together with one of the musicians. When the piece had ended, the musician thanked her and asked her what the piece was about. She then responded that it was about her wedding, upon which the musician remarked that it certainly must have been a wonderful day. 'It was,' she responded dreamily. 'What was the colour of your dress?' the musician then asked. 'It was blue,' the woman responded and then fell silent. The whole group was listening attentively and the moment was very inclusive and happy. For the resident, this was indeed reminiscence, and as Sacks (2008) already remarked, the music need not be familiar to be powerful and create a significant experience in the moment.

The Project Music for Life

The project Music for Life, which we researched (Smilde et al. 2014), was founded by music educationalist Linda Rose and managed by Wigmore Hall in London with lead care and development partner Jewish Care. The project aims both to enhance the quality of life of its participants and to demonstrate to care staff the emotional, social, and physical potential of people in their care. As the majority of projects are delivered in residential care homes, they often involve people experiencing isolation and a sense of disempowerment as a result of the advanced stage of their dementia and physical frailty (Smilde et al. 2014, p. 252 ff).

A Music for Life project consists of eight weekly sessions. Each session involves an hour of creative music workshop involving three musicians, eight participants living with dementia, and three to five participating caregivers.

The workshop takes place in a circle, usually in a shared lounge area. A selection of tuned and untuned percussion is available for each project. Instruments have been carefully chosen for their size, quality, safety, visual attractiveness, and appropriateness for the age group and usually include percussion such as djembes, hand drums, small gato drums, bass metallophones, alto chime bars, chime bar trees, temple blocks, maracas, and a variety of ethnic instruments such as afuches, caxixi, seed shakers, and so on. The instruments are laid out in the centre of the circle in a visually appealing way.

Music is primarily improvised during the workshops, with an emphasis on drawing on the creativity of the group; participants engage in the music-making using percussion, their voice, or through directing the music-making. Consistent musical elements include a framing composition with a short, repetitive, simple theme, which commences and concludes the session and a welcome song in which participants' names are sung. Some interactions in the workshop may directly and actively involve the whole group, whilst other interactions appear to actively involve a smaller combination of individuals (Smilde et al. 2014, p. 253).

Music for Life is a practice that involves the engagement and learning of musicians, care staff, and residents *as a group* through the arts. It is 'the notion that you are with a group of people, that you encourage them to

come out with their own ideas … The key part is that together you develop something into something else, searching and exploring new meeting points, new languages and possibilities' (Sean Gregory in Smilde 2009, p. 279).

The primary stated aim of Music for Life projects is to improve the quality of life and the potential to communicate for people living with dementia. For the person living with dementia, the aim of the project is to create a safe space to explore, enjoy, discover, reminisce, and communicate in new ways, expressing their feelings, thoughts, and emotions, and to support them to take decisions and make choices. For staff working in the settings, the aim of the project is to create a non-hierarchical safe space to explore innovative ways to identify and acknowledge the unique qualities of those in their care, acknowledging the personhood needs of the residents through participation and reflection (Smilde et al. 2014, p. 256).

Despite the fact that correlations can be observed with principles of music therapy, this practice is not intended as music therapy. The project has no clinical aim, and is first and for all artistically driven and striving for social inclusion (see also Smilde et al. 2014, p. 28–29).

The musicians who participate in the workshops are mostly performing musicians with portfolio careers (see also Smilde 2009). They combine various professional activities in orchestras and chamber ensembles and teaching jobs. Two to three times a year they are engaged in projects of Music for Life. Wigmore Hall recruits the musicians and sees to it that the musicians receive a specific training for this practice. Funding is realised mostly through charities, and also the residential homes contribute to the funding of the project in their homes.

Musicians and Residents: A Shared Heart

Initially, we observed a number of workshops and held interviews with experienced Music for Life musicians. After that, we researched a full project that took place in a residential home in London. We were interested in the learning processes that could be observed and wanted to explore the practice specifically from the musicians' perspective in order

to inform future musician development. Three musicians were participating in the project: the music workshop leader *Matthew*, cellist *Fiona*, and harpist *Anneliese*.[2] In addition, a (care) staff development practitioner, Brian, took part. We used methodological approaches like observation, narrative (expert) interviews, group discussions, and reflective journals.

Focusing on the 'person behind the dementia' in a participatory and collaborative artistic process, this project opened up learning processes for the musicians involved, which were strongly influencing their professional lives and development. It stimulated deep reflections about their identity as a musician and their motivation to be a musician (Smilde et al. 2014).

The musicians' ability to reflect on their practice, and on the roles they have and respond to, turned out to be key in this practice. As Schön (1983) points out, critical reflection can give the practitioner the opportunity to make a new sense of situations (p. 61). When the musicians reflected, their implicit knowledge gradually became explicit, which as of then could lead to insight and to the development of learning strategies.

In what follows, I will focus on some examples of musicians' 'learning in transition' (Smilde et al. 2014, p. 21).This entails people's experience, knowledge, and self-reflection—things people have learnt throughout their lives and have absorbed into their biographies. It can lead to a new understanding of people's learning processes, both in terms of emotion and cognition. And that understanding can change both the learner *and* the social context in which the learning takes place.

Artistic and/or Social Practice

Flautist Catherine, a musician who has been involved in Music for Life as a workshop leader for many years, described in an interview how the involvement in the practice had given her a renewed motivation for being engaged in musical performance. She went to the music academy at the age of 18 and soon lost her joy of playing under the high pressure that she experienced. Being part of Music for Life brought her, as she phrased it, 'a way to re-engage with my playing'. It brought her fulfilment, where she realised that connecting to other people was key for her:

'It's kind of connected to bringing out the best in somebody, which I suppose means that you've got to care deeply enough about the communication to make it as possible as you can'.

Cellist Fiona experienced a more or less comparable pathway. In one of her reflective journals, she pointed out her motivation that combines the artistic and social side of the practice, saying:

> I think for me it keeps me sane in the music profession to do this work because it reminds me of why I love music myself. It reminds me of the power of music, … it's not just entertainment, it's a bigger thing that we have. And I think there can be a lot of cynicism in the musicians' world, sometimes in the professional world, and I feel really lucky to have these experiences sometimes. I just don't view it as my next pay check, it's something I can believe in and love. And so I suppose it fuels my love of music and my love of working with people and my belief in the chamber music aspect of it, the playing together, feeding off other musicians and the creativity of that … it does kind of keep me sane because otherwise I wouldn't be able to do music if I didn't have the outlet to come and do this sort of thing. (Smilde et al. 2014, p. 87)

Fiona described in a group interview the two worlds between which she felt she had to choose as a professional musician: the 'elitist' artistic world and that of 'helping people' (Smilde et al. 2014). Her big discovery was that, as long as 'quality' is considered as a cluster of qualities, amongst which artistic quality is of central importance, this 'either-or question' actually disappeared. It is as Linda Rose, founder of Music for Life, argues: 'At all times the quality of [the musicians'] music-making is paramount. For their music to communicate they need to be at the height of their musical skill. Their playing must matter and mean every bit as much as any public performance on the concert platform' (in Renshaw 2010, p. 223).

Another Music for Life musician, violist Daniel, whom, like Catherine, I interviewed in the initial phase of the research and who had been working for many years in this practice, pointed out that working in this context means a steep learning curve: 'It's easy to think of this sort of work as nice and beautiful, and it is, but actually what we go through individually

is quite a lot of, … I don't know, it's not stress or anxiety, but there's a lot you have to internally put yourself through to make it right'.

He gave an example by describing what happens in terms of empowerment, seen from the perspective of his engagement as a musician with a resident with dementia:

> When your [the person with dementia, RS] verbal communication skills are impaired and you know that they are impaired, you know? … Sometimes people [with dementia RS] are not really aware that what they are trying to say doesn't really come across, but sometimes it's that in-between stage, where people sort of give up, because they know they are trying to but it doesn't work. But if you give them back the power of communication in some way, and bring somebody out, you see amazing awareness.

Reflecting the Person Behind the Dementia

'Bring[ing] somebody out', as Daniel termed it, happens through the person-centred improvisation which the musicians use. This entails a variety of approaches that seek to 'tune in' to the group in order to create music that authentically reflects the group and its members, with musicians drawing upon a body of shared repertoire and approaches (Smilde et al. 2014, p. 27). This is not an easy process, as Catherine pointed out; important is not 'getting carried away and allowing yourself to be separated from your attention from the residents or the staff. Sometimes it's possible for us, it's easy to drift off to our music-making which we can do very nicely on our own … But that can become something which is separated from its context'.

The person-centred approach turned out to be a reciprocal artistic process between the musicians, the people with dementia and the caregivers. At some point the musicians reflected amongst themselves in a group discussion that what they are doing in this practice has to do with others as much as with oneself. That was an important insight for them. In particular, the ability of the musicians to make observations through the eyes of the other person turned out to be important. Fiona remarked in a group discussion preceding the start of the project:

> It's like your antennae are all over your body because you're picking up on senses and then you're playing. And then there's your own spiritual and emotional reaction to what's going on. It's a really unusual process. For me, it's a little bit like how I feel in chamber music, when you're really engaged with people, and you're playing off what someone else is playing to you, but it's kind of intensified even more, because you're trying to be someone else's music for them.

In addition, workshop leader Matthew echoed the notion of selfhood (Kitwood 1997), when he observed:

> I think there's … that sort of thing that musicians or artists can do that other people don't do … it's another level of support, isn't it? About acknowledging who somebody is that's completely without words, completely beyond words, a sort of recognition of them … of kind of losing myself so much in the essence of another person. (Smilde 2011, p. 237)

The person-centred musical improvisation in this practice consists of tuning in with a resident *and* oneself, and is therefore the ultimate communication and connection. It is a mutual and equal learning process, 'a shared heart' as Fiona called it, where people living with dementia can realise their personhood in the moment through artistic practice.

Daniel pointed out what this brings to himself as a musician: 'You get something back from all those people. You get an awful lot back. As much as you think you put in, an awful lot of warmth and love comes back'. He described it as 'a personal reward'. And Anneliese reflected on her work in Music for Life: 'I used to just see myself as a sort of conventional performer and then every so often I would do some other work on the side if something came along. And this is really quite central to me now. I wouldn't want to miss it in my working life. Because it's very meaningful work' (in Sevindik 2016, p. 16).

Personal Impact

As mentioned earlier, musicians' learning processes went beyond this particular practice on music and dementia. Catherine reflected on the impact

her work in Music for Life has on all other professional contexts she is engaged in:

> Well, I think I have … assurance that I can make the most of situations involving working with people, which gives me courage when you go into those situations. Courage to take a bit of a risk, or courage to understand how I might do it to make it more effective, whatever it is. Whether it be teaching in the classroom or playing in an orchestra … I think that when you see how effective the things that you do are on people who have dementia, then I think, to me it always seems naturally to follow that those things are effective on all people, just that it maybe wouldn't occur to you to do that. You do that in a dementia setting because you need all of your skills to get response from that person. To engage with them or to communicate with them you need a lot more than your average skill. But I think, were you to use a little bit more than your average skill in all your interactions with any people you'd probably find that they all went better.

Catherine continued, saying:

> I feel like it's important and meaningful … And I think if I had those skills that would make it possible to communicate with somebody with who you otherwise don't find it very easy to communicate, then I kind of have a responsibility to use them to do that … I suppose it's vocational … And if you do think that you're called to do that then you can't imagine not doing it.

Social Inclusion and Equity Through Musical Engagement

It is that learning—whatever form it takes—changes who we are by changing our ability to participate, to belong, to negotiate meaning. (Wenger 1998, p. 226)

Once a person has been diagnosed with dementia, the condition can take up to 20 years to develop further. Just having been diagnosed can be a very challenging situation and lead to a lot of distress. As soon as a person with dementia has been diagnosed, she can have a 'label'; her life

can stop and people may have no expectations of her anymore. There can be a big difference between how someone is viewed and who someone still is.

It might feel like a threat for someone to suddenly sit in such a music workshop, it may show 'where you are going to be'. This needs careful thinking. When engaging with people with dementia, it is important to take their biographies into account: what, for example, is their musical taste? Did they go to concerts in the past, or did they (do they?) play an instrument? Listening to music is a joy at every stage of dementia. Music can be new for some, for others not; thus, it is always a matter of a tailor-made process of development.

There might come a stage when music becomes more and more relevant, a point where the music workshop becomes acceptable and a source of joy—for instance, at that stage where people with dementia start to have trouble being seen as who they really are. Cognitive help and making personhood visible is crucial.

It is also important to be aware that music can carry fear; people with dementia and/or their caregivers can feel unconfident to engage in music-making. People may have had bad experiences in school, and the sentence 'I am not musical' is often uttered. However, as Linda Rose argues, 'Finding the music in the person is finding identity' (personal communication, 24 February 2016).

Daniel reflected on the meaning of being engaged in this practice, saying that 'the longer I've been doing it, the more I've been involved with it, the more meaning it has for me to be doing it. Something as a member of society'. Processes of health and illness and of ageing are in the end also processes of deep meaning. Music can be a significant agent of change with regard to well-being, communication, and meaningfulness. Musicians can therefore be considered 'professionals in creating meaning' and can open perspectives from unexpected angles. This makes the relationship between music and health highly relevant, as health, ageing, and well-being have much to gain from new artistic perspectives (see also Smilde and Bisschop Boele in Hartog and Frick 2016). Staff development practitioner Brian observed at some point: 'Perhaps it is because the creative arts world has a different culture that it can be of benefit and enriching to the care world' (Smilde et al. 2014, p. 247).

'Equity' can be considered a keyword here. People living with dementia are often regarded as being more or less 'lost' for society, but clearly there is a considerable scope for well-being, learning, and communication with others through music. Music can play a role in giving people with dementia a voice and feel equal to all others. The practice of Music for Life proved to be a *reciprocal process*: working as a performing musician with people with dementia and their caregivers was as much of importance to the residents and caregivers as it was for the personal and professional development of the musicians themselves. We saw that clearly reflected in the narratives of the musicians. Brian even observed at some point that 'The music is generated *by* the musicians, but *from* the residents' (Smilde et al. 2014, p. 247).

A sense of change in the musicians is central; without that, there would be no impact and no learning. The equity which is at the basis of the practice legitimises it and can lead to personal and societal impact. The growth and development of everyone involved is a mutual process, and it involves, as said, the people with dementia, the care givers, and the musicians alike. Therefore, the impact of the practice can also tell us that we should be looking at the future (see also Zeisel 2009) instead of constantly unlocking the past. People living with dementia will not just 'deteriorate'. People change all the time and new relationships are built; the same goes for people with dementia. People grow, and through them others grow. People, also those living with dementia, are growing till the end of their lives, and therefore can remain influential. That is an important political message. Equity in this process means to be supported and to be enabled to participate, to learn, and to belong, even when the dementia progresses. Because when there is at some point a lack of mental capacity to do one thing, there might be another instead (see also Zeisel 2009).

Being Here and Being Recognised

The project Music for Life is about the here and now, situated in a place which is not about old songs. There is no reason for a person with dementia to become their past and not be part of their future anymore.

The fact that the person may often not remember does not necessarily mean that she would not feel comfortable in the present and not have a future. The key word when talking about equity in relation to people with dementia is 'recognition'. It is as Linda Rose says: 'Human dignity acknowledges that you and I share an entitlement to be known for all that we are, have been, and can be' (personal communication, 24 February 2016).

All of this is summarised in the simple words 'I can be here, right now', the closing sentence of the poem quoted at the beginning of this essay. In all stages of life, music can be a crucial catalyst to increase people's well-being and their ability to grow, including those living with dementia.

Notes

1. The project 'Music in the Odensehouse' of the research group Lifelong Learning in Music of Prince Claus Conservatoire, Hanze University Groningen. See www.lifelonglearninginmusic.org.
2. These are shaded names (pseudonyms).

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Rama and the Worm: A Performance-Based Approach to Health Promotion in Rural Indonesia

Dan Bendrups, Donald Stewart, and Joko Susilo

Introduction

A significant intersection between health and the arts is the domain of health promotion, where there is a long history of performing arts being used for disease prevention, lifestyle improvement and awareness raising. On the one hand, performing arts can be the content or context for health promotion campaigns, with initiatives encompassing everything from popular songs, to television advertisements, specific fundraising campaigns and other participation-oriented health promotion activities. On the other hand, the creative and performing arts are themselves a vehicle for enhancing health and well-being outcomes, whether as a par-

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ticular therapeutic intervention (e.g., music therapy) or as part of a range of practical or performance-based interventions attuned to social determinants of health (see, e.g., Clift and Hancox 2010, Cooke et al. 2010).

This chapter presents a description and then a discussion of a new health promotion project aimed at reducing the impact of parasitic disease in rural Java, Indonesia. Building on work conducted by Don Stewart over the course of the last decade, the project revolves around the use of Javanese shadow puppetry, or *wayang kulit*, as a vehicle for disseminating health advice and promoting behaviour change. There are many precedents for *wayang kulit* to be used in this way (e.g., Darmawan et al. 1992; Maibach and Holtgrave 1995; Synovitz 1999); however, this project is distinctive in two specific details. Firstly, it involves the creation of a completely new narrative script, using characters and plot lines familiar to the *wayang kulit* repertoire but placing them in new situations that relate specifically to the educational objectives of the project. In order to ensure that these messages are consistent, the play is significantly shorter than usual *wayang kulit* performances, restricted to under 30 minutes' duration. Secondly, where *wayang kulit* usually involves a musical accompaniment of Javanese gamelan, this project disrupts this practice by including Western instruments, especially rock band instrumentation, alongside gamelan in the musical accompaniment, with the intention of creating interest in the play, especially for younger audiences. This musical–cultural fusion is made possible by the professional performance experience of the play's authors and their musical collaborators, who worked together on prior creative projects.

The discussion that follows is mainly concerned with the theatrical, thematic and textual settings of the project, with the musical component to be discussed in a separate publication intended for a more specialist musical audience. It begins by providing contextual background for the project, and then positions the work in relation to epistemic considerations of social determinants of health, and disciplinary orientations of medical ethnomusicology and applied ethnomusicology. The chapter then provides a description of each scene of the play, and finishes with a discussion of the thematic, textual and education choices represented in the play manuscript.

Background

In 2014, the Queensland Conservatorium Research Centre (QCRC), in Brisbane, Australia, established a new research focus area in Music, Health and Well-being, which was launched with an international symposium in 2015. In was in the context of this initiative that Dan Bendrups met Don Stewart, also of Griffith University, who was a keynote speaker at the symposium. Their subsequent discussions about current research led to Stewart commenting on a large project he was undertaking with collaborators in Java, Indonesia, involving the construction of innovative latrine systems (called the Budi Amphibious Latrine, or BALatrine) in rural villages as a means of improving community health outcomes (Park et al. 2016; Stewart et al. 2016). Official Indonesian figures in 2010 indicated that three out of ten households had no family latrine, with only about 35% of the rural population having access to improved latrines, defined as those that hygienically separate human excreta from human contact (Muslim 2010). Open defecation is common, being typical of about 55% of the poorest households (Cameron and Shah 2011).

Funded by the UBS-Optimus Foundation and a Partnership Grant from the Australian National Health and Medical Research Council (NHMRC), the BALatrine project particularly addressed sanitation and related hygiene behaviour in the rural setting. This low cost, locally constructed latrine works in both wet and dry conditions and is designed for local people and materials in resource-poor settings such as rural and refugee communities. Recent funded trials (UBS-OF) showed that the latrine, under development since the 1990s, produces key health benefits. A particular focus of this project is the reduction of infection rates for intestinal worms (soil-transmitted helminth, or STH), which Stewart and his Indonesian counterpart Budi Laksono had previously identified as a significant health concern (Stewart and Laksono 2002). Stewart indicated that, while the initial phase of the project had successfully concluded, more work remained to be done in promoting the systematic use of the sanitation facilities that the project had successfully trialled.

As this conversation was taking place in the context of a symposium about music and health, the discussion quickly turned to possible

performance-based strategies for health promotion. Stewart mentioned that Laksono had already experimented with the use of traditional Javanese shadow puppet theatre, *wayang kulit*, as a vehicle for promoting the use of the latrine system he had developed. Discussion ensued about ways in which this approach could be developed further, leading to the idea of writing new *wayang kulit* repertoire as a further resource to promote the BALatrine project, and developing new musical accompaniments making use of rock band instruments and other non-traditional instrumentation that might make the resource distinctive and attractive to a Javanese audience. The work would thereby serve a number of purposes; it would be a new health promotion resource as well as a creative output, which was deliberately cross-cultural, blending a traditional Javanese performance practice with Western ones.

For Bendrups, this idea resonated with his prior creative collaborations with Joko Susilo, a celebrated *wayang kulit dhalang* and former colleague at the University of Otago. Susilo and Bendrups had previously developed innovative, cross-cultural gamelan performance projects (e.g., Bendrups 2010), and Bendrups was confident that Susilo would be able to share carriage of this new project. Bendrups and Stewart developed a community development grant proposal, which was subsequently funded by the UNESCO National Commission for Australia in 2016, allowing the recruitment of Susilo and the commencement and development of the play that is the focus of this chapter, called *Rama and the Worm*.

Social Determinants of Health and the Discipline of Ethnomusicology

The concept of social determinants of health, as forecast in the World Health Organisation (WHO 1986) Ottawa Charter, and formalised by the establishment of the WHO Commission on Social Determinants of Health (CSDH) in March 2005, recognises that health sits within a complex space that cannot be defined by medical or therapeutic processes alone (WHO 2005). Other factors such as environment and social forces (e.g., poverty, agency, age and social norms) have important

roles to play in determining healthy outcomes for individuals and societies. Within this matrix of social forces, culture and cultural practice can have specific relevance, especially when it comes to notions of traditional 'ways of doing' and 'ways of being'. Where performance traditions are concerned, this means that particular performance genres can be used effectively as vehicles for health promotion, as is the case with *wayang kulit* in this project, by capitalising on their resonance as items of cultural heritage.

As a discipline primarily concerned with traditional performance practices, ethnomusicology has long engaged with matters of health and well-being, reflected in a rich catalogue of studies concerning music in shamanistic practice (e.g., Olsen 1996) or particular healing ceremonies (e.g., Wilson 2006). This engagement is further reflected in two subdisciplines of ethnomusicology: medical ethnomusicology and applied ethnomusicology. Medical ethnomusicology is an explicit initiative towards foregrounding the study of health and medicine in ethnomusicological practice, and has been consolidated through the compilation of an Oxford University Press *Handbook for Medical Ethnomusicology*, with 21 chapters running to nearly 600 pages. Topics in this book range from depictions of shamanic healing rituals through to musical interventions for Autism in children. Applied ethnomusicology is a field in which adherents characteristically seek to generate some sort of social benefit from their research. This may be manifested tangibly, for example, though the creation of a cultural resource such as a digital collection of a particular musical heritage. Applied ethnomusicology projects can also have more intangible ends, such as contributing to the vitality of a cultural movement, or even simply imbuing a given cultural practice or cultural group with respect and dignity. More candidly, Jeff Todd Titon (2009) has expressed the point of applied ethnomusicology as being concerned with the livelihoods of musicians and their ability to act as stewards of musical practice (p. 5). There is a clear place for health promotion initiatives within the field of applied ethnomusicology, where any real or potential improvements in health and well-being outcomes for a community involved in the research would be consistent with the guiding principles of the discipline.

Health Promotion, Behaviour Change and *Wayang Kulit*

It is widely accepted in the literature on social environments and health outcomes that a single initiative, or intervention, to promote behaviour change is likely to be far less effective than a more comprehensive, or integrated approach to changing behaviour (Berkman and Kawachi 2000). One important way to ensure that health knowledge and education is not seen as external and alien to the village is to embed health promoting messages within a culturally familiar and community accepted medium. Thus, through *Wayang Kulit*, the project aims to create a supportive cultural environment for promoting healthy behaviour, in line with WHO guidance (WHO 1991).

This aim aligns neatly with the field of applied ethnomusicology, which is concerned with achieving practical, applied outcomes from music and performance-based research, and this project can be conceptualised as sitting within an applied ethnomusicology framework for a number of reasons. Firstly, the rationale for the project is to support an identified health promotion need, which will bring health benefits to rural communities in Java. Secondly, the project intends to make respectful use of a well-established performance practice to do this. The format of choice is one of a range of traditional theatre practices from Java collectively called *wayang*, a Javanese word for 'shadow'. It is broadly understood to have arrived in Java together with the spread of Hinduism in the region, with historical records of performance dating back over a thousand years from the present. *Kulit* refers to the buffalo hide from which the puppets are usually crafted.

Wayang kulit performances can last many hours, serving as extended entertainment for audiences who might stay for the entire story or drift in and out at different times. The Puppets involved are quite elaborately decorated, though the audience gaze generally focuses on the shadows that they are designed to cast, backlit, upon a white cotton screen. *Wayang kulit* performances rely on having a well-informed puppeteer, or *dahlang*, who is able to manipulate multiple puppets while also maintaining a narrated story line and playing some incidental percussion instruments. The

stories for *wayang kulit* are drawn from the Ramayana or the Mahabharata—Indian epic stories introduced many centuries ago to Indonesia, which have remained in Javanese culture. *Wayang kulit* performances are accompanied by a gamelan orchestra of bronze gongs of various sizes, together with other instruments. The length of *wayang* performances, and the ensemble of instruments required for the accompaniment, makes *wayang kulit* performances quite special.

While the designs, characters and musical accompaniments associated with *wayang kulit* are considered as traditional cultural heritage, the genre can also carry contemporary resonances and, in the hands of an adept *dhalang*, can be used to pass commentary on current events, often humouristically. The standard set of characters includes a subset of jesters, or *punakawan*, who exist outside the traditional Indian epic stories, and who can be used to advance satirical social or political narratives. Additionally, puppets representing modern machinery, vehicles (aeroplanes, bicycles) and other items have been added to *wayang kulit* shows from time to time.

This malleability was one of the key considerations for Bendrups and Susilo in their initial discussions around the creation of *Rama and the Worm*. They were aware of the success that Laksono had already had in using *wayang kulit* to promote the BALatrine project, including both a song (Laksono 2016) and an hour-long play (Doel 2015) performed by Ki Suroto Hadicarito, which described how the spread of illnesses such as diarrhoea and typhus could be tackled through correct latrine use. However, in contrast to Laksono's piece, which contained direct information transfer and instruction, Susilo and Bendrups were keen to explore the potential for such messages to be presented within a more traditional narrative, developed from extant *wayang* storylines. They speculated that a message embedded in story would be particularly effective in connecting with children, who were a key target group of the BALatrine project, but Susilo also believed that adults may also engage more readily with a resource that was based on a familiar story, and where the health message was embedded rather than explicit.

These discussions informed the decision to develop a short (30-minute) narrative play, the subject of this chapter, based on characters and scenarios pertaining to the Ramayana, a standard source of *wayang kulit* reper-

toire, specifically drawing on the rivalry of the main character Rama and his nemesis, the demon king Ravana. While the Ramayana relates specific episodes of conflict between Rama and Ravana, the events depicted in *Rama and the Worm* are not drawn from existing texts but newly invented, as an additional site of conflict between the two antagonists.

A well-known section of the Ramayana story, where Rama goes into a 14-year exile in the forest, provides the context for this new battle. As a narrative space, the forest is both liminal and flexible—it is a place where all sorts of unexpected things can happen, and also a place filled with unexpected traps and dangers. For these reasons, it makes an ideal setting for a new encounter between Rama and Ravana. The narrative unfolds through six scenes, which will now be discussed in more detail, and illustrated with excerpts from the play text.

Scene 1: Introduction

In order to create a sense of familiarity for Javanese audiences, the introductory scene for *Rama and the Worm* resembles a standard *wayang kulit* introduction. In this scene, the *dhalang* commences the story by introducing the narrative of brave Prince Rama and his exile into the Dandakaranya forest. There are some standard lines and narrative devices relating to the Ramayana story that the *dhalang* can draw on for this introduction, and it is customary for the *dhalang* to also signal the commencement of the 'show' by displaying and manipulating two tree-shaped puppets that represent the forest, before any specific protagonists are introduced.

When designing the musical accompaniment for this scene, Bendrups and Susilo decided to try and consolidate the sense of familiarity for prospective Javanese audiences by using standard gamelan accompaniment, drawing on works that they had previously recorded (Bendrups 2010). However, bit by bit, this background was enhanced with the addition of other non-gamelan instruments (e.g., bass guitar and keyboard), which then become more prominent in subsequent scenes.

This scene is also the opportunity to introduce Ravana, himself a source of great danger. Where Rama is an avatar of paramount god Vishnu,

Ravana (variously described as a demon or deity) is a devotee of warrior god Shiva. While not necessarily fundamentally evil as a character, it is Ravana's enduring antagonism with Rama that provides the narrative context for the roles of 'hero' and 'villain' to be played out. In the Ramayana, Ravana famously kidnaps Rama's wife Sita as a way of seeking revenge against Rama and his brother Lakshmana for having cut off the nose of Ravana's sister, Shurpanakha. While *Rama and the Worm* does not intrude upon this story, it nevertheless plays on the animosity between the two main characters, casting Ravana as the villain of the story and Rama as the hero (Fig. 1).

To set the scene for the play, the puppeteer describes Ravana's reaction to a new thematic setting, revolving around an unnamed village:

> The village was very industrious. It had grown in population, and had been blessed with many children. The children swam in the river and played noisily around the village.
>
> The noise angered the demon: "Why do they disturb my forest with their shouting and laughing? This is intolerable, something will have to be done!"

Fig. 1 Puppet silhouettes of Ravana (left) and Rama (right) as depicted in *Rama and the Worm*

> Ravana called for his assistant, and demanded: “find me a solution to this problem!”

This opening provides the context for the introduction of intestinal worms, or STH, to the story, described more broadly as ‘parasites’. It is Ravana’s sly *punakawan* assistant who proposes this as a way of subduing the children:

> His assistant thought for a while and then responded, “Have you thought about enlisting the help of parasites?”
>
> “What parasites?” asked Ravana
>
> “Well,” his assistant said (and continued):
>
> “There are worms that are very, very small, so small they can’t be seen, but they are dangerous because when they get inside our bodies, they can make us very sick. The parasites can live in people’s tummies, and they lay their eggs in human poo which contaminates the environment (land and water). When humans then come into contact with it, they can get reinfected. That’s why it’s important to wash food and wash hands with clean water. When we forget to do this, that’s when parasites can attack.”
>
> For Ravana to communicate with the parasites, he had to also make himself very small:
>
> “I will cast a spell that will make me shrink, shrink so small that I will be invisible,” he said.
>
> “I will tell the parasites to infect the children, that way they will get sick and will be too tired to make all this noise, and I will be at peace.”
>
> Ravana casts a spell; the puppet shrinks and disappears.

This exchange between Ravana and his assistant is important to the health promotion goals project because it provides a fun and engaging way of inserting medical information about STH behaviour, including

opportunities for toilet humour should the *dhalang* desire it. By the end of this exchange, the audience has been made aware of the existence of STHs, have learned how and where they reproduce and have also learned that the parasite and its eggs are often too small to be seen, which is part of the challenge in reducing infection rates.

Scene 2: Rama and the Village

There is an implied elapse of time between Scenes 1 and 2. Scene 2 opens in a non-defined space in which we encounter Rama, together with his faithful servant Pedro. Rama and Pedro wander into a section of the forest where they have not been before, and eventually come across a village, which the *dhalang* frames as follows:

> The village showed signs of having been very great, but the fields were overgrown and there were very few people around.
>
> Rama called out, 'Hello, is there anyone here?"
>
> Eventually, he heard some groaning.
>
> So he called out again, 'Hello, is there anyone here?"
>
> The groaning was a bit louder.
>
> "That's strange," Rama thought to himself. "It seems to be coming from that building: I'll go and investigate."

It is clear to the audience that this is the same village encountered by Ravana, and sufficient time has now passed that the parasites have begun to affect the village population. An old man confirms this, telling Rama:

> "Prince Rama, once we were a very happy, busy village, but recently we have all been getting sick. The children are so badly affected that they don't have the energy to go out and play. We simply don't know what could be happening. Can you help us?"

Rama is at this stage unaware of Ravana's involvement, but his heroic instincts lead him to offer whatever assistance he can. At this point, Rama's observational powers are put to use by the *dhalang* to reinforce the scene's messages about STH habitat and behaviour:

> Rama tries hard to work out what has gone wrong. He looks around and notices that the village has grown very quickly, and that there are now many more people who have been pooing in the environment, in streams and in the countryside around the village. He also notices that, with so many more people, there is more rubbish and food scraps around.
>
> He returns to the old man: "Tell me, is it true that your village has grown very quickly?"
>
> "Yes."
>
> "Also, when the children were busy playing, did they often stop to clean their hands after going to the toilet, or before eating?
>
> "They were having too much fun playing to stop to do this."
>
> Rama, who is very knowledgeable, says: "I think I may know how to help. With the growth of the village, and all the extra rubbish and human waste (poo, etc.), and flies that carry worm eggs around, parasites will be here. The eggs are so small that you can't see them, but they grow into worms and can cause sickness like this."

In this exchange, Rama demonstrates that he has accurate knowledge of the issues associated with STH infection. In the exchange that follows, however, Rama must rely on his magical powers to be able to help any further. He explains to the old man that he will shrink himself with magic and then returns to confirm his diagnosis. He then proposes to go inside one of the children to see the extent of the infection:

> Rama casts his spell, shrinks, and very soon returns: "It is as I suspected. There are parasite eggs and larvae everywhere. Now I need to shrink so that I can see what's going on inside one of the children's stomachs."

The old man calls to one of the boys who were very sick, "Boy, open your mouth and let Prince Rama go down into your tummy."

"No, I don't want to!"

"Boy, listen to me—you must do what Prince Rama expects."

"Yes, father."

Rama casts his spell again and leaps down the boy's throat.

Scene 3: Rama Finds Ravana

Rama's decision to go inside the boy sets up important developments in the story line. Firstly, resetting the scene to the inside of the boy's tummy allows for some creative development in the shadow puppet backlighting, which is changed to red to imply the new inter-abdominal scene location, adding interest to the performance. Secondly, the boy's stomach provides an opportunity for the surprise reintroduction of Ravana to the narrative, and sets up the subsequent fight scenes:

Rama lands in the boy's stomach, and is surprised by what he sees. Indeed, there is evidence that parasites have been working to keep the boy sick, and in the corner, having a rest, is the figure of Ravana.

Ravana wakes up: "I was having such a good rest inside this sick, quiet boy. Who dares disturb my slumber? Oh, it's you, Rama. This will teach you to interrupt my sleep …"

Rama and Ravana fight, but Ravana is still drowsy and is unable to match his opponent. This said, the fight is also causing some intestinal distress to the boy, which the *dhalang* can draw on to extend the fight scene, for example, by invoking bubbling gasses that knock Rama off his feet just as he's about to finish off Ravana. In the end, Ravana manages to escape down the intestines, shouting to Rama that he will be back with reinforcements.

In addition to the change in lighting, the background music has now changed to being almost entirely performed on modern rock instruments, punctuated by sound effects and a range of percussion instruments. The ensemble provides an improvised accompaniment to the fight scene that helps to reinforce the intensity of the scene.

Scene 4: The Worms

Scene 4 is intended as an interlude between two larger battle sequences and provides the opportunity to introduce the 'worm' puppets that represent STHs (see Fig. 2). These are new puppets, created by Susilo, inspired by microscope images of real STHs. For most of the scene, the worms are presented swimming serenely around the gut environment to a gentle ambient music accompaniment. Their serenity is soon interrupted by Ravana, who comes in fleeing from his prior battle with Rama.

At the end of the scene, Ravana comes racing into the worms' environment, imploring the worms to assist him in his battle (Fig. 2):

> Get up, get up you lazy worms! Rama is coming to kill you all! You must fight! Kill Rama!

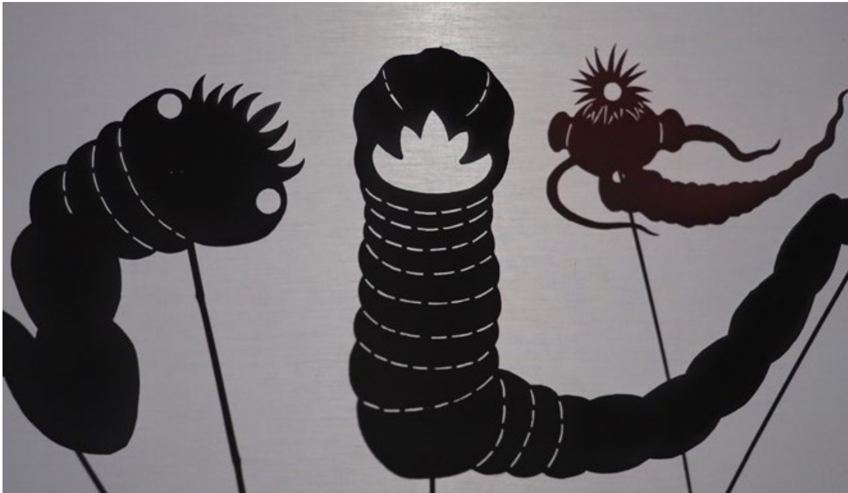

Fig. 2 The worm puppets created by Joko Susilo for *Rama and the Worm*

Scene 5: The Battle

The penultimate fifth scene is the narrative, sonic and visual climax of the play. Just as Rama tries to follow Ravana, he finds his path blocked by a giant STH, the titular 'worm' of the play, emerging from the side of the shadow screen, and must confront this new danger. There is no attempt to be species-specific here, rather, the intent is to make the worm look sufficiently menacing that it is taken seriously as a threat by Rama, thus reinforcing that STH are a threat worth taking seriously in real life.

The worm slowly creeps onto the screen, backgrounded by horror movie–inspired musical accompaniment, before turning his attention to Rama:

> "Prince Rama, how dare you come in here! My family and I have made our home in this boy's tummy. I hatched from an egg that was on some food he ate without washing it, and without washing his hands, and I have been here ever since, growing larger and larger. Whenever he eats something, I am waiting for it, and I eat it, and his body grows weak because I am stealing all the nutrients instead. Ravana said you have come to get rid of us. Well, I will get rid of you."

A new battle scene unfolds, with Rama now pitted against some worms, supported by a rejuvenated Ravana. Once again, the musical accompaniment is improvised, following the motions of the puppets on the shadow screen. Rama is sorely tested by this challenge, but being the hero that he is, he ultimately prevails. Rama slays the worms, while Ravana escapes to fight another day.

Scene 6: Rama Gives Advice

With Ravana vanquished, Rama leaves the boy's tummy and returns to full size. He explains to the villagers what had transpired: that Ravana had gathered many parasites and that this was why everyone has been so

sick. Importantly, Rama explains to the village that, while he has won the battle, the war against parasites is not over:

> "I have defeated Ravana, but this is not the end of the battle. I now need your help to make sure everyone gets better."
>
> "What can we do?" ask the children.
>
> Rama answers, "The parasites were able to come here because of the rubbish and human excrement that has accumulated as the village has become larger. There are three things you must do to reduce the sickness."

This exchange sets up the most important health promotion message of the play. In this final scene, speaking from the vantage point of a conquering hero, Rama is able to impart the following information:

> "Firstly, you must ensure that poo goes in a place where it is contained, not just out in the open. This is most important. If you do this, the parasites will be trapped and unable to move around in your environment."
>
> "Secondly, you must wash your hands whenever you go to the toilet. And always make sure your hands are clean before you touch any food you wish to eat."
>
> "Thirdly, fresh food and water needs to be clean, to make it harder for the worm to return. Make sure you get water that is clean and fresh. Sometimes it may need to be boiled first to make sure the invisible germs are gone."

The first instruction relates specifically to Stewart's previous project, which financed the construction of latrines in the villages to which that *Rama and the Worm* is directed. The latrines are the intended place of containment for human faeces, in a context where traditionally there was no awareness of the need for this containment. The second and third instructions are standard disease control measures that will also help to control parasite infection. It is likely that the audience will have heard such instructions before, so they will be able to sympathise with Rama's

message. The intention of having the message told third hand within the story is to ensure that the audience do not feel like they are being badgered with advice that they may have already heard.

The scene, and the play, closes with Rama's departure. His final word to the village is to remind the villagers that they have the power to control the STH infections themselves, as long as they stay vigilant about their hygiene. To reinforce this, Rama frames the process as an ongoing 'battle' against infection:

> "I trust that you will remember these instructions. It's up to all of you now to join the battle."
>
> Confident that the villagers would now become well again and that Ravana would not return to trouble them, Rama departed.

The play then concludes with a mirror of the introduction, with gamelan musical accompaniment returning to the foreground and with the *dhalang* using the tree puppets to visually 'close' the puppet show.

Discussion and Conclusion

The narrative described in the text is, in many respects, consistent with standard, accepted practice in *wayang kulit* performance. The opening and closing scenes resemble generic standards, and the characters in the play (with the exception of the worms) are well known to *wayang kulit* audiences. While the village scene is newly created for this story, the meta-theme of conflict between Rama and Ravana is well established in a multitude of other *wayang kulit* story lines, and therefore familiar to audiences. While the addition of the worm as an antagonist is new, it is not out of the ordinary for specific *wayang kulit* performances to incorporate new or 'surprise' puppets from time to time, and Susilo's expertise in crafting the worm's form ensures that it resembles, in most design aspects, the form of the other puppets used in the play.

One area in which the narrative is quite distinctive is in Scenes 5 and 6, which are set in the inner-space of the child's abdomen. The change

in setting is visually signalled by the use of a red gel over the (white) backlight, which casts a light red hue behind the shadows of the puppets, as if they are observed through a layer of body tissue. The narration of the *dhalang* is vital to completing the illusion that the characters have now entered an inner world. However, this is not a difficult transition to make as both Rama and Ravana are acknowledged as possessing powerful magic, which allows them to undertake pretty much any imaginable transformation. Likewise, Ravana's ability to influence the actions of parasites (and to control a talking intestinal worm) is also easily explained through reference to his magical powers. These allusions to magic do, however, make the content of Scene 6 quite important, as it is in the final scene that the *dhalang*, narrating through the voice of Rama, is able to switch from the fantastic to the real, by reminding the audience that they have a role to play in maintaining their health and by providing them with the actual information by which to do so.

Overall, despite the innovations presented in the narrative and its musical accompaniment, *Rama and the Worm* remains true to the traditional function of *wayang kulit*, as a story-telling genre based on stock characters, and respects many elements of traditional performance form. While the text excerpts presented in this chapter appear in English, they are composed so as to be readily translatable into Bahasa Indonesia, with little need for change in the general tone and pace of the narration. The addition of a non-standard musical accompaniment is perhaps the most radical departure envisioned in the project, and the full impact of this part of the experiment remains to be seen. However, given their prior musical collaborations, Susilo and Bendrups are confident that the musical accompaniment will be recieved as both appropriate to context and sufficiently new and interesting so as to become a talking point, raising the profile of the project and further contributing to its health communication objectives. The ultimate purpose of designing the accompaniment, and the film itself, in this way reflects a desire to connect culturally with the intended audience, in a way that foregrounds culture as a vital contribution towards the social determinants of health for the communities involved in this project.

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Community Arts, Employment and Poverty: Exploring the Roles of Musical Participation and Professionalisation in Health Equity

Klisala Harrison

In urban poverty contexts internationally, vast effort is put into performing arts initiatives (e.g., Harrison 2008, 2013a, Loughran 2008, Tan 2008). Culture workers, administrators and community members organise and participate in music, dance, visual arts and theatre initiatives happening within contexts of community organisations, non-governmental and governmental organisations, and arts businesses, with funding from corporations, private foundations, churches, donations, governments and concert tickets. In non- and decaying welfare states, such efforts form part of a web of opportunities and services that offer what a person needs for basic survival (e.g., food, clothing and housing) as well as what one needs to make one's life better. Common sense usually puts the arts in the latter category. However, this chapter explores how participation in performing arts also benefits some requirements for survival: health and well-being.

Despite the range of institutions, funders, people and interests involved in arts initiatives in urban poverty, commonalities across countries exist

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at the levels of political or economic interests (e.g., making up for a social "safety net" or gentrification), justificatory discourses (e.g., human rights, c.f. Ramos and Ochoa 2009), approaches or methods, modes of artistic participation and results of participation. Results might be therapeutic gains (Harrison 2009), building skills or gaining employment in the arts. Gaining skills in performing arts, including towards employment, may be understood as increasing socioeconomic status, which is a social determinant of health. Even though formal arts programs within institutional contexts may—at first glance—seem "top-down", methods adopted by local organisations often aim to be as socially horizontal as possible and "magnify" grassroots forces. Examples include community arts approaches, Augusto Boal's forum theatre and efforts inspired by Paulo Freire (c.f. Araújo 2008). As well, arts initiatives set in third-world poverty typically get more academic and media attention than in first-world poverty. It should be remembered that poverty contexts in first-world countries also involve the often-called third-world conditions of preventable disease epidemics, heightened mortality rates and miserable qualities of life (Farmer 2005).

Yet what specifically is the role of arts participation in promoting employment? How can arts initiatives alleviate urban poverty? How can employment in the arts promote health equity, and what do community arts (centrally involving musical expressions) contribute? This chapter defines musical expressions broadly, to include any form of human expression involving music, such as theatre or dance.

The chapter derives from an ongoing 15-year research project on music–poverty relationships. Ethnographic examples and first-hand accounts of urban poor and artists working with them come from community arts contexts, particularly music theatre, in Canada's "poorest postal code" (Smith 2007, p. 103): Vancouver's Downtown Eastside (pop. over 18,400 (City of Vancouver 2013)). My work draws on a continuing research relationship with this community involving hundreds of interviews, participant observations in performances, close collaborations with performing artists and secondary source research. Continuing relationships in community has allowed the following of artists over the 15 years and, thanks to generous performing arts companies, access to performer data that they continuously collect for internal evaluations.

This writing was produced through substantial dialogue with Savannah Walling, artistic director of Vancouver Moving Theatre (VMT), based in Vancouver's Downtown Eastside. Dialogues with Priscillia May Tait, an interdisciplinary performing artist; Dalannah Gail Bowen, a blues singer; and Kathryn Walker, executive director of the local Saint James Music Academy, also enriched the writing.

Health equity is approached here through the lens of one social determinant of health, socioeconomic status. In so doing, this chapter elaborates on Harrison 2008 and 2013a, which were the first ethnomusicological studies of social determinants of health vis-à-vis music. The term socioeconomic status is used in medical science and social science disciplines in order to identify types of social ranking within socioeconomic inequity. Social rank is one of the main social determinants of human health and mortality, a position it shares with aspects of inter-social control and autonomy, and social cohesion. More specifically, socioeconomic status is understood as a concept and composite measure of at least three interrelated but not fully overlapping types of status experienced by people: status of income (sometimes called economic status), status of education (often discussed in terms of social status) and status of occupation (also called work status) (Dutton and Levine 1989, p. 30). Socioeconomic status is a macro-level factor informing all sorts of ways that people participate in society and culture (including arts). Whereas socioeconomic status is the main focus here, health equity is one conceivable outcome of a participatory artistic approach I will discuss. Health equity may be defined as focusing "attention on the distribution of resources and other processes that drive a particular kind of health inequality—that is, a systematic inequality in health (or in its social determinants) between more and less advantaged social groups, in other words, a health inequality that is unjust or unfair" (Braveman and Gruskin 2003, p. 255).

This chapter specifically studies the impact that participation in community arts initiatives of VMT has had on the skills development and socioeconomic status of people living in, or close to, poverty. The impact of the initiatives is illustrated through various participant examples highlighting three in detail. The chapter aims to identify roles of musical participation and professionalisation in promoting health equity. Focusing on urban poor, and the promotion of professional employment in the

arts, the chapter discusses possibilities of community arts participation and approaches for enhancing socioeconomic status as a health determinant, meanwhile recognising that professionalisation implies markets in which there are normally "haves" and "have-nots", and in this broad perspective, socioeconomic-related equity is a conflicted (if not impossible) aim. Yet at the tangible level of the every day of artists who are socioeconomically disadvantaged, increasing their levels of skill, professionalisation and, in so doing, socioeconomic status can have powerful effects on their lives and employment situations. The study shares ethnographic and media data with a view to increasing knowledge of successful arts-developmental approaches that increase socioeconomic status and related benefits.

Socioeconomic Status as a Determinant of Health

Public health scholarship (e.g., epidemiology and the sociology of health) has found the relationship between socioeconomic status and health to be gradated. People of relatively more socioeconomic status have better health and longevity, while people of relatively less socioeconomic status have worse health and longevity, people somewhere in the middle experience middling health and longevity and so on. This is called the health gradient, dubbed the "status syndrome" by epidemiologist Michael Marmot (2004). Marmot conjures an imaginary parade of people of different ranks and statuses of income, education and occupation—people from the economically poorest to the richest, people with no formal education to Oxford graduates, and people from unskilled workers to doctors and judges. In general, the higher up one is on the social "ladder", the healthier and longer-lived he or she will be; the less status he or she has, the greater risk of disease and death (Marmot 2004). For instance, if one travels on the subway from downtown Washington, DC, to Montgomery County, Maryland, for each mile (1.6 km) travelled, life expectancy of residents rises by about 1.5 years. There is a 20-year gap in length-of-life between the poor blacks at one end of the journey and rich

whites at the other (Marmot 2004, p. 2). The status syndrome operates within single societies (e.g., single nation states) but not across different societies (Kawachi and Kennedy 2002).

The root cause of the health gradient is stress. Higher placement of individuals in socioeconomic hierarchies positively correlates with not only lower levels of stress but also lower rates of disease and mortality; lower placement correlates with higher levels of stress, disease and mortality (Adler et al. 1994). The human experience of low social rank, including low socioeconomic status, impacts the body physiologically as a psychosocial stressor that can generate physiological stress reactions. Experiencing low socioeconomic status precipitates the release into the body of so-called stress hormones and initiates complex neuroendocrine responses (West and Ironson 2008, p. 432) that adversely affect the immune system. Resultant reactions in the body are complex and various but include a faster build-up of atherosclerotic plaque in coronary arteries (and thus increased risk of heart attack), a tendency to suffer from central obesity, more damaging levels of high-density blood fats and an increased likelihood to be resistant to insulin (Wilkinson 2000, p. 36). Chronic stress negatively impacts the brain, thymus gland and other immune tissues, circulatory system, adrenal glands and reproductive organs. Types of asymmetrical power relationships that discriminate according to social rank catalyse a hard-wired stress reaction in humans (and some animals [Adler et al. 1994, p. 20]) that can have devastating effects on health and can end in death. For urban poor, stress might result from having inadequate access to housing, education or other services.

Shifting the socioeconomic status of an individual, for example, via music and theatre activities in the Downtown Eastside, suggests a shift in probable health outcomes for individuals. Recent studies and health equity activism by medical researchers, including at the World Health Organization's Commission on the Social Determinants of Health (CSDH 2008), assert evermore firmly that gaining income and income status over the course of one's life positively affects health and life length; gaining education and educational status positively affects health and life length; and gaining occupational status does the same. Study after study has found that, in general, such social mobility determines health status

and not vice versa (although, of course, there are well-documented, isolated examples of ill health causing downward social mobility), and, in the main, social rank determines bodily processes associated with disease and not vice versa (Marmot 2004, p. 59, pp. 119–120).

An individual's health and mortality rate generally improves when his or her experienced status regarding occupation increases. Important early landmark studies that made this point were conducted by on British civil servants, starting in 1967. The two Whitehall studies, as they are known, investigated the health relevance of the occupational status of workers in the highly stratified British civil service. The first Whitehall study found that of 17,530 male workers, office support workers at the bottom of an office hierarchy had four times the risk of death at the ages of 40–64 as compared to administrators at the top of the hierarchy. At the oldest age studied, ages 70–89, the first (low-ranking) group had twice the mortality rate of the second (high-ranking) group (Marmot et al. 1978). The second Whitehall study considered both male and female workers, and concluded that the status syndrome applies to both women and men (Martikainen et al. 2003). Similar results have been produced through numerous studies including of arts occupations. For instance, a study of 72 years of records from the Academy Awards showed that (male) actors who won Oscars lived on average 4 years longer than actors who had received Oscar nominations but did not win (Redelmeier and Singh 2001).

Health impacts of unemployed people becoming employed are particularly striking—which is also relevant for the present study of arts and development. A study of the 1971 British census, for example, demonstrated that people who became unemployed had 20% higher mortality than people who remained employed at the same social-class level. A higher mortality rate for the unemployed does not die down as people die off (Moser et al. 1984).

Promoting employment of the unemployed, via arts, for instance, can thus be understood as promoting socioeconomic status and thereby health. In the arts for development and health literature, short-term studies make the link between community arts and health (e.g., South 2006); however, impacts of skill-building on health via employment are best observed over the long term like the present study. Although being inclu-

sive when promoting skills development through the arts is a keystone of the literature on community arts (Veblen et al. 2013), what including urban poor in arts participation (Carey and Sutton 2004) means for socioeconomic status as a health determinant has not yet been observed, and is explored in this chapter.

Community Arts and Arts Employment in Canada's "Poorest Postal Code"

In Vancouver's Downtown Eastside, an organisation that has impacted large numbers of people—several thousand—and staged numerous music theatre productions, as well as festivals and arts employment-related projects, is Vancouver Moving Theatre or VMT (for other examples, see Harrison 2013a). The model set out by VMT's work—particularly how it balances accessibility to benefits of the arts, to the most needy, with professionalisation—forms the ethnographic focus of this chapter and offers a synthesis of community arts approaches with arts professionalisation that can benefit health.

VMT describes itself as a professional interdisciplinary company founded in the Downtown Eastside in 1983 by Terry Hunter (executive director) and Savannah Walling (artistic director). It has pioneered arts-based community development projects tailored with, for and about the Downtown Eastside community since 1999 (Vancouver Moving Theatre 2016). The author has followed the role of music participation in employment for VMT participants since 2003, as a researcher, violinist, theatre performer and university instructor arranging work experience for students in VMT projects.

VMT works primarily with people living in and around poverty, which, in addition to urban poor, includes people participating in the historically and culturally diverse Downtown Eastside but living outside the community, as well as people in more affluent income brackets taking up residence in the gentrifying neighbourhood (as the poor are pushed out by real estate development). VMT's definition of a Downtown Eastside community member is "anyone who lives, works, volunteers,

studies, socializes or has family past or present in the Downtown Eastside" (Walling, S., pers. comm., 31 July 2016). Consistent with geographies represented by national and city statistics, VMT defines the Downtown Eastside culturally and historically:

> Once known simply as the East End, today's Downtown Eastside is made up of several historic districts: Victory Square, the Hastings corridor, Chinatown, Strathcona, Powell Street/Oppenheimer (a.k.a. Japantown), North Hastings, Gastown and the port of Vancouver. Ancestors of today's Coast Salish people have lived here since time immemorial. The spit of land was originally bounded by Burrard Inlet on the north, the former tidal flats of False Creek to the south, and on the east and west between salmon-bearing tidal streams that once flowed up the ravines at today's Campbell and Carrall/Columbia Streets. (Walling, S., pers. comm., 31 July 2016)

Today, local poverty is profound, with 84–85% of residents in the poorest sub-areas of the neighbourhood living below Canada's low-income cut-off according to the 2001 Census of Canada, and 70–79% according to the 2006 Census of Canada (City of Vancouver 2013, p. 11; Statistics Canada 2011). Low-income cut-off means a threshold "below which a family will likely devote a larger share of its income on the necessities of food, shelter and clothing than the average family" (Statistics Canada 2015, p. 7). The phrase refers to income-based poverty as well as relative poverty, or exclusion from a standard of living considered widely in Canadian society to be reasonable and acceptable. The statistics do not count the homeless, though, who number about 900 persons in the Downtown Eastside according to the City of Vancouver (2013). In part due to the Downtown Eastside's support services, it also is a hub for the 800-plus more homeless people in Vancouver (Thomson 2015), therefore approximately 1700 people total according to the cited counts. The homeless suffer primary poverty in which any income is too little to provide basic necessities (Harrison 2013b, p. 4).

Poverty has negative consequences for health. Study after study has shown that contexts like poverty, in which people experience low socio-economic status and other social determinants damaging to health, produce poor health results (Berkman and Kawachi 2000). Mirroring statistical trends in other poverty areas, during my research, life expectancy

in the Downtown Eastside was 10 years less than the Vancouver average—66 years for men. Life expectancy for women was 69 years, 5 years lower than the city average (City of Vancouver 2005).

Yet for unemployed people, VMT's projects have had the most dramatic effect in terms of occupation-related health equity because VTM uses music theatre as a kind of training forum. Skills-building in the arts happens through professionals who serve as mentors, sometimes together with apprentices (community members or university students).

Specifically, VMT uses the Colway Theatre Trust model for creating community plays, which emphasises professionalisation in the arts. Colway-inspired productions like music theatre by VMT offer mentorship in artistic skill-building; the method uses professional directors, musical directors, stage managers, costume designers, lighting designers and other crew, while opening up participation in other aspects of theatre-making to community members from varied backgrounds (Jellicoe 1987). Thus, diversely abled singers and musicians receive guidance on performing music in theatre from one or two musical directors. Singing workshops might be a part of this, for instance. As is usual, a musical director offers inputs on musical ensemble work. VMT does make curatorial choices that vary according to the particular project. Sometimes opportunities are open to people of any background; other times, people of specific backgrounds or those who, although they may not be professional performers, make music for their own pleasure. At other times, specific performers may be asked to perform music they have created, or to share cultural practices and teachings.

The Colway Theatre Trust method process for making large-scale all-inclusive community plays was discovered by British playwright Ann Jellicoe, and has inspired a community play movement across Canada in which professional artistic teams engage with communities and involve locals as actors, musicians and theatre makers. VMT is one of the Canadian movement's pioneers. VMT writes that when the company embarked on a partnership with the local Carnegie Community Centre to create *In the Heart of a City: The Downtown Eastside Community Play*, they agreed to be guided by Jellicoe's community-play principles and values: a process that replicates nature's principles for building healthy eco-systems through

diversity, interconnectivity and interdependence (Walling et al. 2015, p. 193). These values have guided VMT's practice ever since.

Relevant VMT productions of musical theatre, pop operas and narrated music and dance include the first production in 2003, *In the Heart of a City: The Downtown Eastside Community Play*, as well as *East End Blues & All That Jazz*, *We're All in This together: The Shadows Project—Addiction and Recovery*, *A Downtown Eastside Romeo and Juliet*, *Storyweaving*, *Bread & Salt* and *Against the Current*. These productions tell local stories and histories or adapt myths or literary works to local contexts (c.f., Walling et al. 2015).

The success of VMT's model, according to its producer and artistic director, is due to how it approaches participation in the arts. The participation, in some ways, retains aesthetic hallmarks of the Colway method, like other examples in Canada. In Toronto theatre director Ruth Howard's words, this includes

> non-competitive casting and participation; inclusive definition of community; cultural, social and intergenerational diversity; multi-year time span; collaborative process; care for both artistic and social quality; a high-calibre artistic team; numerous participants; content drawn from local research; an intensive production period; a surrounding community workshop process; cross-disciplinary and spectacular style; staging that implicates the audience; celebration; intertwined process and product; making something that can't happen better anywhere else; and caring about what happens afterwards. (Walling et al. 2015, p. 165)

However, VMT approaches arts participation uniquely as a continuing process, in their case starting in 2002 with preparing the Downtown Eastside community play. Although a typical Colway-style play ideally takes two to three years from inception to performance, VMT is continuously evolving community-engaged and musical theatre productions and offering other community-engaged learning opportunities that build towards those. This sustains longer processes of community arts making and artistic skills-building until the present in Vancouver's Downtown Eastside.

In this continuing developmental process, each of the music theatre productions can include workshops, training sessions, mentorship networks, conferences and, of course, rehearsals in music, dance, visual arts and theatre. For one example, the 2003 *In the Heart of a City: The Downtown*

Eastside Community Play involved pre-production workshops in puppet making, choreography, acting, popular theatre, theatre sports, theatre games, singing, dancing in a style of Métis (one of the three "Aboriginal" or kinds of indigenous groups designated by the Canadian government), hand drumming, flag making, banner creation and mural making. Professionals provided guidance during rehearsals in the disciplines of set building, theatre lighting, costume and prop creation, singing, music ensemble performance, acting techniques, stage managing, choreography and shadow puppetry. Many subsequent productions have included training, mentoring and capacity-building. For instance, *We're All in This Together: The Shadows Project—Addiction and Recovery* included workshops in forum theatre, shadow theatre, writing, collage and digital media training, as well as a writers' retreat, forums and panels, public presentations for gathering audience feedback and the usual mentoring during rehearsals and performances.

Between major music theatre productions, smaller projects focused only or also on training are available. These likewise increase the general level of professionalism in subsequent productions and in the community. One example is the 2011 Downtown Eastside Artists in the Street Program, which "supported local artists with training, promotion and employment at local events … across Vancouver" (Walling et al. 2015, p. 140). Other examples are leadership training programs in community-engaged arts, "Arts for All Institutes", held in the Downtown Eastside on a fairly continuous basis (in 2009, 2010, 2013 and 2014).

In addition, professional theatre productions undertaken by other companies in co-producing partnerships with VMT have set aside roles for Downtown Eastside-involved musicians and actors. Examples are musical theatre productions of Dostoyevsky's *Crime and Punishment* and *The Idiot* as well as Dicken's *A Christmas Carol*, titled *Bah! Humbug*, which is accompanied by seasonal songs, First Nations (indigenous Canadian) song, rock music, other popular songs and original lyrics written by Downtown Eastside residents. Two Downtown Eastside artists, singer/guitarist Mike Richter and actors Steven Lytton, performed with the original cast in 2011 and have been part of the show annually at Christmastime ever since.

These productions thus integrate professional artists with artists-in-training. In addition, since 2004, VMT has produced the *Heart of the*

City Festival, an annual 12-day festival that features 100–150 events. Downtown Eastside artists are invited to present alongside artists ranging from cultural treasures to students. All VMT events are either free, by donation for Downtown Eastside residents, or, in the case of ticket fees, have tickets set aside for low-income community members, so that people from all economic backgrounds ideally and often have the chance to attend and interact about one another's artworks.

Like in the Colway community-play model, all community members from many walks of life, and artists from emerging to professional, are welcomed to participate in VMT's festivals and music theatre productions. A variety of approaches to "inclusivity" exists, but community arts engagement is locally adapted. In the Downtown Eastside, this means in addition to including people of all genders, abilities and disabilities, and ethnicities, also being inclusive of people suffering from issues associated with poverty and trauma. Walling notes:

> People can be on different "meds," self-medicating, or in recovery [from addiction]. Some have personal hygiene or memory issues. Occasionally someone's been too dangerous or disruptive to participate. If they're verbally abusive, we move them out right away or others will be afraid. The challenge is to do this in a way that is respectful, does not humiliate, and leaves the person with the ability to come back at another time or in another context. (Walling 2012b, p. 24)

VMT's working process aims to "leave the door open" to diverse people to participate in its projects when they are ready, as opportunities emerge.

There remains room in each community arts performance creation to include new participants. In principle, the Downtown Eastside Heart of the City Festival programming is open to whoever wishes to participate in projects that meet the festival's mandate to present and nurture development of artists, art forms, cultural traditions, history, activism, people and great stories about Vancouver's Downtown Eastside. For VMT productions during the festival or at other times of the year, the company offers financial incentives, paying participants a modest fee for taking part in each rehearsal and performance. Artistic director Walling elaborates,

> VMT is wrestling *all the time* with how to deal with accessibility and how to come up with creative strategies to deepen and broaden engagement (while operating under limited funds). How do we do this so people don't feel cheated or left out?
>
> Sold out shows, for instance—sometimes you have to turn away people at the door and there's nothing we can do about it, or maybe there's a limited number of low-income community tickets, for instance, for projects on which VMT is a co-producing partner.
>
> The only times we can say "all are welcome" is when everyone who enters the door is a volunteer (as in the Downtown Eastside community play, and even then people were limited in their participation by life events). When we pay fees or honourariums, we're limited by the funds on hand.
>
> We have a variety of payment strategies around participants. We provide industry standard/modestly non-exploitative and/or minimum-wage fees for professional artists and staff. We provide honourariums for emerging artists and community members for rehearsals and performances, and taking on extra responsibilities. We've started exploring ways to expand engagement by providing honourariums for participating groups such as choirs or dance groups (for which we can't afford to provide individual honourariums). Sometimes volunteer performers come forward from our community partners and family members—to get involved. Sometimes we have provided leadership training, mentoring or skill building opportunities for work exchanges or in-kind services from the community participants or emerging artists. Some projects we can provide volunteer participants with meals and capacity building workshops in exchange for their participation during workshop development of a project or sometimes performances. We come up with different strategies for different partners, situations, community members and projects. (Walling, pers. comm., 22 July 2016)

Urban poor advocated payment after the community play in 2003 and nutritious food. VMT then developed their variety of creative payment strategies ranging including wages, honourariums and in-kind exchanges. Some productions involving long rehearsals now include healthy meals, which really help people suffering from consumption-based poverty, in other words, being unable to purchase food (c.f. Harrison 2013b, p. 4).

Rosemary Georgeson, interdisciplinary artist, co-writer of *Storyweaving* and food caterer for several VMT projects, commented, "Providing the basic needs for community participants—from good healthy food, coffee and tea to a warm place free of stress—allows people to create, go deeper into their creativity and feel valued for what they bring" (Walling et al. 2015, p. 180). Lytton commented that it is better that all participants are paid now because "money gives value to the time and effort involved and thereby dignity" (Harris 2009, n.p.).

Consequently, urban poor have been able to cycle in and in again to VMT's projects, many of which simultaneously offer training. Although sometimes uneven, the resulting performance aesthetic marries commitment and trueness, combining semi-professional and amateur levels as established and new participants perform together. Walling adds, "VMT's artistic aesthetic is simultaneously raw and refined, and speaks from the heart" (pers. comm., 22 July 2016). The overall level of professionalisation increases with each production and as the body of participants gains more experience as a whole. At the same time, some people, for example, with no income, living on the streets, deep into addiction and illness therefore may be unable to participate consistently in rehearsals (c.f., Porteous 2003 in Harrison 2008). There is a threshold of time commitment required for stage performance that is unachievable for some.

Like all organisational services associated with urban poverty, such projects can be critiqued for having a financial structure in which professionals directing the projects get paid more than amateurs. They train practicing musicians and actors, which are among the most poorly paid jobs in the arts in Canada (Harrison 2013a, p. 65). In addition, arts professionalisation in urban poverty may be associated with promoting gentrification, in which poorer community members normally get pushed out, while an economy, in part, stimulated by the arts attracts more affluent residents (c.f., Harrison 2008). If employment is a benefit, not everyone professionalises to the same degree. These are all critiques of applied arts approaches to development. Even though arts development has been called "a social tonic" (White 2009), it is not socially unproblematic. The guiding mission of VMT's Downtown Eastside Heart of the City Festival helps to keep the company on track; to serve as a high-impact bridge building force that gives voice to the Downtown Eastside, its low-income residents, cultural communities and neighbourhoods.

Since this book focuses on health and well-being, I would like to bracket the above concerns and highlight the health benefits that opening arts participation and employment can offer to those who are unemployed and living in poverty. When it comes to people who otherwise have no chance to participate in performing arts and have no employment possibility, initiatives like those of VMT can make a big difference in their lives. The present study does not make medical measurements, but rather explores roles of arts in promoting a social determinant of health, socioeconomic status.

Increasing Employment Possibilities as Pursuing Health Equity: Socioeconomic Status

After taking part in VMT projects, participants have gone on to do many things directly related to the skills gained through the projects—organise arts projects; write plays and books; perform concerts; present exhibits and history walks; get more education; take jobs onstage or backstage or in other fields; teach; make recommendations for cultural programming and policies; advocate for housing and community services; and sit on boards of organisations (c.f., Walling et al. 2015, p. 149). There are hundreds of examples of profound professional and personal changes. Relevant to music specifically, one participant, Jim Sands, went on to create three music-based, one-man shows and tour them across the Canadian festival circuit. Several members of the Prince family (mother, daughter and granddaughter) together with five other participants performed in a professional, First Nations hand-drumming group. Hannah Walker, who performed in the Downtown Eastside Community Play at age 12, grew up to co-found with Jamie Elliot the roots/folk duo "Twin Bandit". Although the duo has toured in Europe and across North America and appeared at the Winnipeg and Vancouver folk music festivals, they continue to give back to their home community, performing for local events like the Homeground and Downtown Eastside Heart of the City Festivals. Hannah's mother, Kathryn Walker, who helped with the Downtown Eastside Community Play, went on to found a non-profit orchestral and choral program in the Downtown Eastside called the Saint James Music

Academy. The Academy's youth choir performs annually in VMT's *Bah! Humbug!* production. Choir students receive honourariums and the choir is paid a fee that contributes to programming at the Academy.

The dramatic effect of the training on the lives of urban poor, who have emerged into professional performing artists, will be illustrated with three additional examples. These singers and actors, Luke Day, Priscillia May Tait and Dalannah Gail Bowen, first participated in the Downtown Eastside community play in 2003, then went on to work professionally in music and theatre. Singer/actor Luke Day said:

> In September of 2003 I was going through a very difficult time in my life. I was in a state of depression and despair, and living a surreal existence: I was working, but living on the street. I called Queen Elizabeth Park my home. I only found out about the community play because on the Sunday auditions took place at Carnegie[. T]he weather was abysmal and I went there to get out of the rain. I saw the audition notice and said why not? Once involved I began to regain hope. For the first month or so of rehearsals I still lived on the street, but soon got my life headed in the right direction. It is not a stretch to say that had I not become involved in the play my mental and physical health would have declined precipitously. The joy and sense of well-being I received as part of that play ennobled and inspired me. I have been involved in two productions outside of the DTES this year. (Harris 2006, p. 10)

After singing and acting in the community play, Luke Day went on perform in several other music theatre productions of VMT. He also worked as a singer and actor in *A Month in the Country* (Vagabond Players), *Seagull* (United Players), *Six Degrees of Separation* (I'm a Little Pickled Theatre), *Rebecca* (Vagabond Players), *Lady Windermere's Fan* (United Players), *Urinetown; The Musical* (Firehall Arts Centre), *The Ecstasy of Rita Joe* (Firehall Arts Centre) and *The Idiot* (New World/VMT), among other productions.

When I first interviewed Priscillia May Tait, she had just finished performing one of the two lead singing and acting roles in the community play. Several years earlier she had moved, together with her two-year-old son, into an indigenous housing project after being homeless in the Downtown Eastside. Subsequently she attended university for three years,

during which time she was also a devoted *Wetsuwet'en* (First Nations) single mother caring for her son. She had recently been taking antidepressants, which had been prescribed to combat feelings of despair related to being unemployed and not having been able to complete her university degree, and the deep sense of loss she felt when the paternal grandmother who had raised her passed away (Tait 2003; Tait, P., pers. comm., 23 August 2016). In following years, she continued to build arts skills, for example, through undertaking collage artworks thanks to grants from the Vancouver Foundation, performing poetry, and publishing articles on locally relevant issues. In the past several years, Tait has become visible as an emerging interdisciplinary artist in Vancouver. For example, she has performed with Margo Kane's professional "Coming to the Fire Ensemble" and the acting troupe "Creative International", at festivals and educational events; she has danced with Karen Jamieson and the Carnegie Dance Troupe; she has organised and hosted a supper at the Carnegie Community Centre honouring women on the Downtown Eastside; and she has toured with the Train of Thought, a community-engaged project produced by Toronto's "Jumblies Theatre" with partners across Canada including VMT.

Dalannah Gail Bowen describes her life before participating in the Downtown Eastside community play as dire:

> In 2003, I was living the life of a crack addict. I was couch surfing in places that I never in my wildest dreams thought I would be in and I can honestly say that it was the lowest point in my life. Every day my sole purpose was to feed my addiction. The recognition that I was deeply in trouble came when I no longer only did the drugs in the evening but morning, noon and night … it became my whole reason to exist … After thirty-six years of making music, I was no longer singing very much. I did the occasional gig but nothing big. It was like my lifeline was cut off. (Walling et al. 2015, p. 90)

A talented blues singer with a passionate and textured voice, Bowen found the encouragement in community arts to recover from addictions, and restart her music career—even taking it to an international and award-winning level. By 2006, she played lead in an award-winning production of *Urinetown: The Musical*. She wrote a one-woman show and

her first musical about her "living through hell" in one-and-a-half years in the Downtown Eastside—*The Returning Journey*, produced by Vancouver's Firehall Arts Centre in 2007. That same year, at age 62, she recorded her first blues album, *Momma's Got the Blues*. It received airplay in Canada and in far-away Poland, France and Argentina. In the 2008 International Songwriting Awards, the record placed among the top 50 blues albums in North America. Together with owen Owen OWEN, Bowen recently became the first British Columbia blues artist to place in a recent International Blues Challenge in Memphis. In 2015, she was honoured as a Master Blues Artist in the Blues Hall of Fame in the USA. During the same period, she—being African Canadian and Cherokee (indigenous from the USA)—also performed with Snowy Owl Drummers, a group of indigenous singers and hand drummers from the Cherokee, Cree, Squamish, Lakota and Anishnaabe nations. Bowen founded the Downtown Eastside Centre for the Arts, a grassroots community arts organisation that offers an accessible and welcoming environment for creative engagement, creative exploration and creative expression in the Downtown Eastside community. Working from the belief that art is a healing tool, the Downtown Eastside Centre for the Arts has created opportunities to affect personal change by providing guided art practice in a safe and supportive setting. Such outcomes of arts participation, among the hundreds of others (some carefully documented in the book *From the Heart of a City: Community-Engaged Theatre and Music Productions from Vancouver's Downtown Eastside, 2002–2013* [Walling et al. 2015]), are evidence of individuals increasing their cultural capabilities and socioeconomic status.

Conclusion: Health Equity Benefits of Increasing Employment Possibilities via Community Arts

This qualitative study illustrated that socioeconomic status increases for participants in VMT music theatre productions, festivals and community-engaged arts initiatives. The artistic activities pay participants and participating groups a fee or honourarium, thereby helping with income and

occupational pride. Because these projects increase artistic skill, they can also be considered to enhance educational status via informal education. The skill-building has laid the foundation for additional training and new employment for those who have wished and had the talent to persevere. For formerly unemployed people like Day, Tait and Bowen, gaining creative opportunities as emerging artists and working as professional performing artists meaningfully increased their statuses of income and occupation. For other participants, resultant employment was outside of the arts, but used skills developed in VMT projects such as communication, teamwork, confidence or, for the many immigrants in the neighbourhood, language fluency. In addition, a community arts approach to increasing professionalisation in the musical arts, on a recurring basis, was highly inclusive of people in marginal life situations and remained so while progressively building skills of participants.

From these data, it can be concluded that *community arts approaches that pursue professionalisation on an ongoing basis are special when it comes to increasing socioeconomic status through the arts. Everyone who participates gains at least some socioeconomic status. If such professionalisation efforts are continuing, the status increase can build continuously.* The inclusiveness of community arts approaches to status-building make them of special note as an approach, and the Colway model and creative solutions of VMT offer models for practitioners wanting to take a try. This is well motivated since, as this chapter explained, public health research has found through statistical measures that increasing socioeconomic status benefits health outcomes. The VMT approach is of note in that it involves multiple dimensions of human life, encouraging all human expressions engaging music and facilitating many different opportunities for capacity development. The approach deeply nurtures an individual's multi-sensory engagement with the world and allows him or her to develop in a way that benefits him or her, on his or her own terms, yet in a way that offers benefits of skill and esteem.

The musical projects documented in this chapter thus increased arts professionalisation, enhanced the socioeconomic status of participants and promoted that social determinant's positive health implications. They developed human health–benefiting resources of status and capacity to build status via arts in a community of urban poverty, and in this

way, furthered health equity and promoted social justice (equality of opportunity) of the poor. Such human impacts, illustrated by the many cases given in this chapter, to quote Downtown Eastside poet Sandy Cameron, are the result of VMT's sustained musical "work to make our community a better place, not a perfect place, but a better place. If we look for immediate results in this work, we are in danger of falling into despair. Society doesn't change quickly and our commitment is for the long haul" (Walling et al. 2015, p. 149).

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How Can Arts Participation Promote Indigenous Social Determinants of Health?

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Introduction

The arts are an integral part of many First Peoples cultures in Australia, and elsewhere in the world, and seen as an avenue to support individual health, and community and cultural renewal (AG 2013; AIHW 2009; CCYPWA 2011; Marmion et al. 2014; Spark 1991). In this chapter, we draw on Indigenous Australian and Canadian frameworks to explore this

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relationship between arts and health, and, in particular, how arts activities interact with the social determinants of health (SDOH). Of course, like with any arts activity, the ways in which this is realised are always contextually and culturally specific. As such, we ground these broader considerations of arts and health within two distinct arts projects called *Living Cultures* and the *Desert Harmony Festival*. Both projects were led by a regional arts organisation, Barkly Regional Arts (BRA) in close collaboration with local Elders and community members in Central Australia. The *Living Cultures* project involved making a documentary for Indigenous community television about the process of travelling back to traditional homelands to connect with country, share important stories about the land and bush tucker, teach young children about culture and share songs written about the place and its ancestors. The *Desert Harmony Festival* involved running an annual arts festival that brings together the region's culturally diverse population to engage in music, dance, art, film, food, theatre, workshops, adventure tours, sports and cultural activities. The festival programme features a combination of professional locally produced work from the Barkly region, community performances and Australian productions that travel to collaborate with local artists as part of the festival.

We have worked with BRA for over eight years in various capacities. During this time, Bartleet and Sunderland have been involved in facilitating and evaluating arts-based service learning activities for university music students hosted by BRA (e.g., see Bartleet et al. 2016b; Bartleet and Carfoot 2013). More recently, Bartleet, Sunderland and Lakhani have been involved in a larger research project that explores the relationship between the arts sector and regional development and the role that arts organisations, such as BRA, play in sustaining the arts sector and in developing the region in both social and economic terms. This broader research project has a strong health dimension, given that participation in the arts and cultural sector has been shown to not only result in economic benefits for regions but also assist in "building resilient communities and improving physical, mental and social wellbeing" (Allain 2011). This is echoed by *The Aboriginal and Torres Strait Islander Health Performance Framework* (Commonwealth of Australia 2012), which recognises that First Peoples draw strength from a range of health determinants such as

connectedness to family, land, culture and identity; and that Aboriginal and Torres Strait Islander people who participate in arts and cultural activities have been shown to have markedly better physical and mental health (Biddle 2011). The *Living Cultures* project and *Desert Harmony Festival* formed important preliminary case studies in this larger research project and provide useful insights for this particular book, which is exploring the ways in which music can promote social justice and health equity.

At this point, we should acknowledge that while BRA is not an Indigenous-run organisation, it is a culturally diverse organisation that works with a large number of Aboriginal people in the region. The Barkly region has a high Aboriginal population (64.3% across the region, and up to 97% in some communities), which is a much higher proportion than Australia as a whole, which has approximately 2.6% (ABS 2011). The Barkly region is also home to a diverse number of language groups including Warumungu, Warlmanpa, Warlpiri, Jingili, Garawa, Mudburra, Kaytetye, Alyawarr, Anmatyerre and Wambaya. In response to this culturally diverse context, some of BRA's projects like *Living Cultures* are specifically run for, and with, Aboriginal community members, while others, such as the *Desert Harmony Festival*, are aimed at bringing Aboriginal and non-Indigenous community members together to present, engage, access and participate in the arts together. Given this context, we have chosen to focus on Indigenous SDOH frameworks and literature to explore how participation in the arts can promote the SDOH for Indigenous peoples, and culturally diverse communities more broadly. Working alongside the culturally diverse peoples of the Barkly, we also write this chapter and these reflections from the cultural standpoint of non-Indigenous Australian and Canadian authors who have worked as musical and academic collaborators with Aboriginal and non-Indigenous arts and community workers at BRA.

Also of significance for this chapter is the remoteness of the Barkly region. It spans approximately 323,514 km^2 and is home to 8137 people (ABS 2011). It has a population density of approximately two people per 100 km^2 and the most populous town, Tennant Creek, includes a population of roughly 3560 (ABS 2011). In the Barkly, homelessness is 30% higher than the national average, domestic violence statistics are amongst

the highest in Australia, rates of kidney disease are the highest in the world, residents earn an income that is approximately 20% lower than the national average, the labour participation rate (44.7%) is lower than the Australian average, and the unemployment rate (10.6%) is very high (ABS 2011). Extreme weather conditions are experienced for long consecutive periods and distances between communities are many hundreds of kilometres with roads in very poor condition. In contrast to these concerning health and social statistics, within the region, arts and culture are very strong. We know, for instance, from grassroots practice and observations (Bartleet and Carfoot 2013), ethnomusicological research (Barwick 2005), and studies of Aboriginal Cultural Centres (Christen 2007); that many artists practise in the region, maintain their connections to country, social and kin networks and in a number of cases earn an income.

Our Research Approach

In order to investigate this highly complex environment further and look at the ways in which arts participation can promote Indigenous SDOH, we employed a case study approach. Data collection included interviews and focus group discussions with community members and staff at BRA in the two aforementioned projects. In April 2014, research team members accompanied BRA staff and local community members to a place called Walapanba for the *Living Cultures* project. In July 2014, we travelled to Tennant Creek to explore the impact of the organisation and facilitation of the *Desert Harmony Festival* on connections within community and health and well-being for community members and participants. We have subsequently continued to travel up to Tennant Creek and the Barkly Region for further research, but will focus on the insights generated from the data collected for these two projects in this chapter.

For the *Living Cultures* project, we conducted interviews, focus group discussions with Aboriginal artists who reside in Tennant Creek and documentary staff and observations of the project. An interview was conducted with a senior Aboriginal community member involved in the project (n = 1), and a focus group was conducted with staff involved in creating the documentary (n = 5), and observations were made of the

project and trip to Walanpanba. Focus groups, interviews and observations aimed to ascertain the importance of the trip to traditional lands for Aboriginal community members and BRA staff.

For the *Desert Harmony Festival*, we conducted 17 interviews with musicians and engineers ($n = 3$), a government representative, a council member, staff and/or volunteers at BRA ($n = 4$), NGO managers ($n = 5$), and interpreters and community workers ($n = 2$). Questions focused on the involvement of the community in the management, leadership and resource development and allocation for the *Desert Harmony Festival*. Furthermore, questions focused on the ability for the *Desert Harmony Festival* to meet the priorities and needs of the community.

We analysed interview and focus group transcripts using the data analysis software NVivo. We reviewed each transcript and plotted findings into the Assembly of First Nations, *First Nations Wholistic Policy and Planning Model* (see Fig. 1 based on Reading et al. 2007), which proposes the SDOH for Indigenous people in Canada. Some determinants within this model were amended for relevance to Aboriginal and/or Torres Strait Islander people in Australia, and these determinants were entered into NVivo as nodes and each transcript included as a source of analysis.

In order to contextualise these case studies further, in the following sections, we first discuss a range of insights from the literature that explore the relationship between Indigenous arts and health and then outline the process we followed to draw insights from an Indigenous SDOH framework for the purposes of examining the BRA case studies, before turning to insights from the *Living Cultures* project and *Desert Harmony Festival* themselves.

The Arts, Indigenous Peoples and the Social Determinants of Health

As studies have shown, because the arts are so deeply entwined in the continuation of culture and tradition (AIHW 2009; CA 2009; Marmion et al. 2014), they have the capacity to play an integral role in promoting Aboriginal peoples' health and well-being and impacting upon the

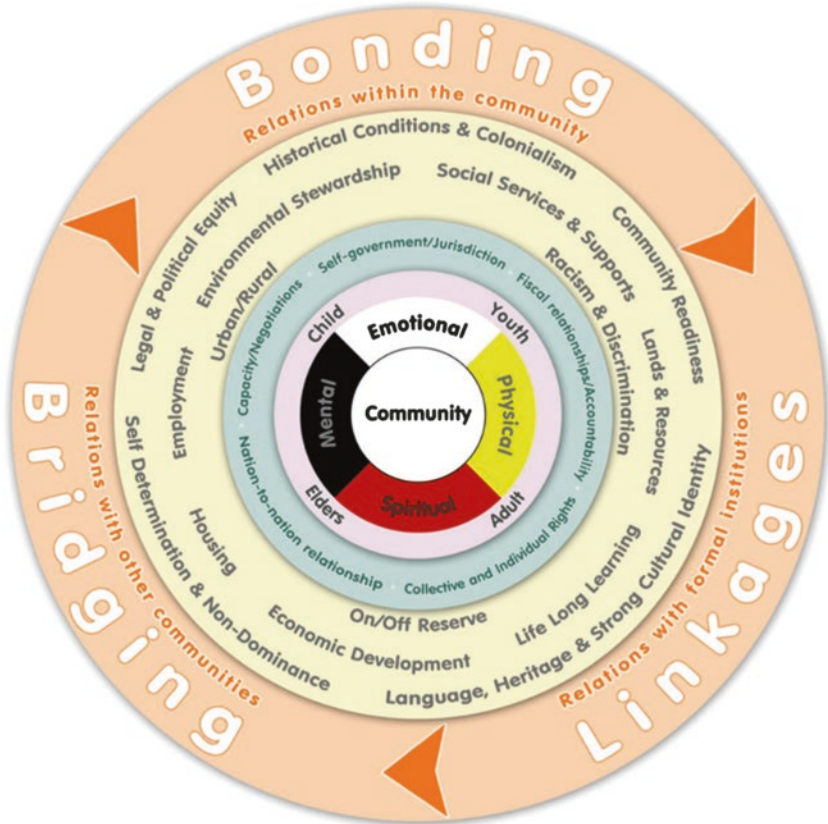

Fig. 1 First Nations Wholistic Policy and Planning Model (Canada) (Reading et al. 2007, p. 10)

SDOH. For example, Jersky et al. (2016) found that art activities that were co-located within a health services environment during the Ngala Nanga Mai ("We Dream") Parent Group Program, positively influenced social connectedness and maternal well-being and heightened parenting skills among parent participants. Sinclair et al. (2016) found that artistic creations, including traditional sand-drawing, were effective in educating communities about addressing and preventing kidney disease. Similarly, McEwan et al. (2013) found that community-based hip hop performance was an effective way to generate discussion and inform people on sexual

health issues while also building community connections. Consequently, researchers and others have recognised the potential for the arts to encourage positive health outcomes by providing effective treatment and support to alleviate health issues while also protecting against future ill health. This is also recognised on a policy level. In the Northern Territory where BRA is located, the government's arts and cultural policy *Vibrant NT* states, "Culture is an important asset for the whole community, and a vital tool for the growth of community well-being and prosperity" (NTG 2016, p. 9).

The earlier mentioned studies provide a preliminary knowledge base to understand how participating in the arts can encourage favourable individual and family level health behaviours, and access to culturally safe services. It is important, though, to also consider how the arts can shape broader and potentially more complex "upstream" SDOH (see Gehlert et al. 2008) for health and well-being, such as historical trauma, poverty, employment, living environments (including access to natural environments and Indigenous homelands), government and institutional policies, and social ideologies such as racism and assimilation. Complex Indigenous SDOH includes not only "intangible" social, cultural, and political phenomena and experiences but also the objective physical manifestations of colonial and racist forces and ideologies on Aboriginal land and the Australian built environment (e.g., see Johnston et al. 2013; Neath 2012).

As Bamblett et al. (2014) and others (e.g., see Priest et al. 2012b) have indicated, complex SDOH for Aboriginal peoples in Australia require complex responses that incorporate social, historical, political and cultural dimensions. Australian Aboriginal children are, for example, over ten times more likely to be removed from their families than non-Indigenous children; a figure expected to triple over the coming 20 years (Family Matters 2016). After centuries of forced removal, many Aboriginal childrens' experiences "go beyond the individualistic or familial and incorporate pervasive intergenerational trauma" (Bamblett et al. 2014, p. 206). Trauma informed responses drawing on arts and cultural approaches have been a vital element in responding to ongoing historical and intergenerational trauma associated with forced child removal (e.g., see http://www.wealli.com.au/).

By using Indigenous SDOH frameworks, we open our analysis up to SDOH that are not commonly considered in mainstream Western scholarship when thinking about health and well-being. These include, for example, historical and ongoing colonisation and trauma and connections to spirit, culture and the arts (e.g., see Atkinson 2002; Sunderland et al. 2015). This frames health and well-being not just as a physical or biological experience but also a historical, social, cultural and political one. While we do not endorse homogenising assumptions about what makes people well and happy, we see that the connections to spirit, culture and the arts, and recognition of colonial history as Indigenous SDOH; something that can potentially apply to all peoples not just Indigenous peoples and have relevance for a culturally diverse organisation such as BRA. As Diane Goodman (2011) has pointed out, perpetuating the inequity of unearned privileges of colonisation is not good in health and well-being terms even for those who experience that privilege. Further, as Wilkinson and Pickett (2009) have explored at length, inequality is not good for anyone, even those at the highest ends of the income spectrum. Finally, as John Macdonald (2010, p. 34) has articulated:

> The philosophy and understanding of health of ATSI [Aboriginal and Torres Strait Islander] peoples provides all Australians with a more holistic view of health and strengthens our understanding of the social determinants. We have a unique chance to learn with and from the Indigenous population, including gaining insights into the role of spirituality and sense of belonging to 'country', making us different to other Anglophone societies. An Aboriginal understanding of health helps Australia to critically examine the western medical model of health and deepen our understanding of comprehensive Primary Health Care.

Here Macdonald and others have expanded on what a Māori community worker once said to Naomi in shorter and perhaps more eloquent terms, "what is good for Aboriginal peoples is good for all peoples" (Lesley Kelly, personal communication).

The arts have been cited as a practice that can support autonomy and empowerment for Indigenous peoples in Australia. The lack of self-determination and autonomy—and in Ottawa Charter for Health

Promotion terms "ability to influence one's own health and wellbeing"—caused by ongoing and historical colonialism is a pervasive negative SDOH for Indigenous peoples in Australia (see Blagg 2012; Tsey et al. 2010; Whiteside et al. 2006). As Whiteside et al. articulated,

> Relative powerlessness resulting from colonial dispossession and associated passive welfare policies has long been recognised as a critical factor influencing the health and wellbeing of Indigenous Australians, yet it is hard to find well-evaluated health and social interventions that take an explicit empowerment approach. (Whiteside et al. 2006, p. 422)

O'Dowd (2009) has also explored Indigenous place, identity and nationhood as fundamental SDOH, not only for Aboriginal and Torres Strait Islander Peoples in Australia, but also for non-Indigenous peoples. She argues that the continued construction and marginalisation of Aboriginal and Torres Strait Islander peoples as "others to Australianness" in public discourse has led to institutionalised racism and ongoing fragmentation of Australia as a whole (O'Dowd 2009, p. 803). O'Dowd suggests that "place and identity within the 'Australian' nation-state need to be re-framed for the possibility for Indigenous inclusion and/or provide for the sovereignty of the Indigenous nations" (2009, p. 803).

Our research suggests that the arts are uniquely positioned to respond to this need for both a reframing of the "Australian" nation-state to include Indigenous sovereignty and individual Aboriginal and Torres Strait Islander Peoples to influence their own health and well-being outcomes. In order to explore the possibilities of this further, in this chapter, we look at some of the ways in which arts practice in the Barkly region has been central to re-integrating a sense of place, identity and nationhood for Aboriginal and non-Indigenous peoples in the region. In particular, we draw on insights from the *Living Cultures* project and *Desert Harmony Festival* by using a SDOH model, which we have adapted from Indigenous peoples in Canada. While we acknowledge the complexities and challenges of using models from First Peoples in other parts of the world, our adaption of this Canadian framework was strongly informed by the outcomes of a literature review of Australian Indigenous SDOH conducted by Dhayne Thomas, Naomi Sunderland and Glenn Woods in

2015–2016 (see Thomas 2016). Using this SDOH framework, we explore both the ways in which participation in the likes of the *Living Cultures* project and *Desert Harmony Festival* contributed towards the health and well-being of participants as well as the challenges of facilitating work with such aims. In order to set the backdrop for this research, in the following sections, we outline the SDOH framework, contextual information about the broader Barkly Region and the research methods and analysis approaches we used for this work.

Indigenous SDOH Conceptual Frameworks

Several Australian teams have worked to establish unique SDOH frameworks that can respond to the diverse cultural, political and historical experiences of Australian Aboriginal and Torres Strait Islander peoples. Existing highly valuable work such as Carson, Dunbar and Chenhall's (2007) edited volume on *Social Determinants of Indigenous Health,* for example, draws on mainstream SDOH models from the fields of health promotion and public health to explore the particular determinants of health for Aboriginal and Torres Strait Islander Peoples. Priest et al. (2012a, p. 180) developed a novel framework for understanding Aboriginal child health and well-being in an urban setting that comprised four main themes: "Strong Culture; Strong Child; Strong Environment; and Strengths and Challenges". Through reviewing several major Indigenous and non-Indigenous models of "eco-health", including the Rumbalara Aboriginal Cooperative's (2008) *Our Wellbeing* holistic model of Indigenous Wellbeing, Kingsley et al. (2013) also emphasised Australian Aboriginal and Torres Strait Islander peoples' connection to traditional lands or "country" as a fundamental SDOH.

In this chapter, we have sought to merge understandings gained through the earlier mentioned literature with a comprehensive SDOH model developed by the Assembly of First Nations in Canada (see Fig. 1) to guide our thematic analysis of the BRA case studies. We have done this both to expand the potential international relevance of our work and to respond to the breadth and depth of SDOH reported in the BRA study.

Specifically, and of relevance to our work, this First Nations Wholistic Policy and Planning Model has community at its core. It has four components of well-being (spiritual, physical, emotional and mental); four cycles of the lifespan (child, youth, adult and elder); five key dimensions of First Nations self-government (self-government/jurisdiction, fiscal relationships/accountability, collective and individual rights, capacity/negotiations and nation-to-nation relationship); SDOH; and three components of social capital (bonding, bridging and linkage).

Living Cultures, the *Desert Harmony Festival* and the Social Determinants of Health

It is our hope that in drawing on this model, it will encourage further work by other researchers who are keen to explore the ways in which arts participation can promote Indigenous SDOH. While it is beyond the scope of this individual book chapter to illustrate *all* the ways in which this adapted model can be applied to arts practices on the ground, in this section, we have chosen to focus on two of the dimensions *Employment* and *Language*, *Heritage and Strong Cultural Identity* and two of the resulting components of social capital *Bonding: Relations Within the Community* and *Bridging: Relations with Other Communities,* from this model that featured prominently in our research of the *Living Cultures* project and the *Desert Harmony Festival* in order to illustrate how this framework might be used.

Employment

Employment has a substantial impact on a person's well-being. Research has not only shown the undeniable connection between income, socioeconomic status (SES) and health but also the impact employment has on self-worth and well-being measured through quality of life indicators (Reading et al. 2007, p. 12). For many participants in these projects, and indeed other BRA initiatives, arts-based learning opportunities have resulted in employment opportunities. For example, a manager at an

NGO located within Tennant Creek suggested that the organisation of the *Desert Harmony Festival* provides community members with the opportunity to learn new skills concerning event organisation, planning and music engineering and production. Furthermore, this training was also characterised as contributing to formalised education. This point is articulated by this manager:

> There are a lot of skills that people need to go out of town to get the qualifications and experience in that. Yet, with Barkly Arts operating here, they can actually do the skilling training here as long as they get RTOs [Registered Training Organisations] like CDU [Charles Darwin University], Bachelor and other registered training organisations access to, to be able to do the theoretical and oversee the actual presentation of certificates when completed. The expertise, Barkly Arts, if they're supported funding wise, can bring in the expertise do the training, at the same time be able to generate things like Desert Harmony and other activities to be able to support locals in creating new niche opportunities for work because the net, like the internet, is just phenomenal how you can create your own job.

The production, engineering and event organisation training and education that volunteers, and community members, experienced was also highlighted as contributing to employment opportunities within and outside of the *Desert Harmony Festival*. The arts-based programmes surrounding the *Desert Harmony Festival* and *Living Cultures* project were also characterised as helping participants further develop their skills in an art form. In terms of young people, musicians and producers working with BRA indicated that their work enables them not only to teach young people how to play music but also to envision a potential musical future for themselves. For example, a musician participant within the *Living Cultures* project stated, "We're teaching kids from the primary school how to play basic guitar chords, so they could learn to play guitar or any other instruments if they please, and maybe they could pursue a life through music". Furthermore, for these musicians, learning music is clearly a lifelong process. For example, a musician interviewed as a part of the *Living Cultures* project indicated that he learns from his Elders whilst he teaches the younger generation, "I think here in Tennant Creek, [unclear] we try to show there is, I think, the positive side of Tennant

Creek and that we work here and we try to show our younger generation and teach them music. Of course, I will learn—I've learnt from my elders here, as well".

Learning an art form was also highlighted as a pathway to future employment as a musician or educator. For example, a music educator reflected on his experiences as a young person learning music, and how this contributed towards his receipt of employment:

> I first went to the music centre in 2009, I think it was, when I was 10, the same as these boys out there. I just was playing drums with them, but then they showed me a couple of chords. Then, I asked my dad if he could teach me how to play guitar. Now that he's taught me, I know more than him now. I can play better. That's all just from the connections that I get from music. You learn a lot of things through other people, and if you really want to keep going, then just pursue it and believe you can achieve it.

Participants indicated that their involvement in arts-based activities provided them with the opportunity to learn new skills that contributed towards their receipt of employment. Employment is an instituting factor impacting on individuals' health and well-being (AFN 2013). Unemployment and precarious employment have the potential to negatively impact an individuals' psychological health status (Benach et al. 2007) and may contribute towards higher rates of morbidity (AFN 2013). Furthermore, employment has been identified as a fundamental determinant that can impact community health (AFN 2013; Schulz and Northridge 2004). The findings suggest that lifelong learning through arts-based practices can favourably impact employment outcomes of residents living in remote Australia. Over time, it is expected that this may contribute towards positive health outcomes for those participating, and potentially the wider community.

Language, Heritage and Strong Cultural Identity

Culture has been identified as an important determinant of health particularly within First Nations communities. A positive and balanced state of well-being cannot be achieved unless individuals, families and com-

munities are supported to openly express their cultural identity (Reading et al. 2007, p. 16). Participating in arts-based activities that were part of the *Living Cultures* project provided participants with the opportunity to reconnect with significant parts of their culture and history; for example, the identification of bush tucker, and the recollection of significant stories relating to the country they were walking on. In this way, the lifelong learning established as a part of arts participation is also impactful on the health determinant *Language, Heritage, and Strong Cultural Identity*. For example, in the following excerpt, a BRA staff member who worked on the Living Cultures project described how participation impacted young participants:

> So we were all—got a really good personal relationship happening as well, where we could actually, you know, people coming up and talking, not video-related things, with the kids … they said some really great things but it's like all the kids almost said the same thing as well but they obviously knew that they were there to learn the culture. They'd been told the stories and they were well primed to knowing why they were actually…

For young people, visiting country as a part of the *Living Cultures* documentary was especially important. As many young people had never had the opportunity to visit their country, they were missing out on an important aspect of their history. As indicated by a BRA staff member, participant learning about culture and history within the *Living Cultures* project was highlighted as extremely important. This was highlighted as especially important considering that some participants were developing art inspired by their country—which they had yet been able to visit. As a BRA staff member explained much of their artwork was taking place somewhere else, and not on *their* country:

> Well I think in particular it's important because Mungkarta is not the place where—it's just a community that they sort of migrated to and just started and it's really—it's hard to explain to your children about the past. It's hard to—when they're not in the space. You're talking about some like as you were saying with Tristan, he's been told stories and stuff so he's painting about a place he's never been before and that's really hard to sort of grasp for anyone to grasp their roots.

The learning and rekindling of culture was also something that all participants—musicians, BRA staff and community members—experienced. As a part of the *Living Cultures* project, musicians, BRA staff and community members indicated that visiting country provided them the opportunity to share history. For example, a BRA staff member reflecting on a site visit during *the Living Cultures* project described how a conversation between an Elder and community members that was evoked by them visiting significant sites on the visit to their country provided new knowledge to many community members:

> …he actually provided then far more information on those stories—when we sat in that creek bed and he was talking about the rain dreaming and the traveller rain dreaming. He was the one who knew the directions where that rain dreaming went and actually taught that to the [person's name]. They knew parts of the story but they didn't—they knew basically it started in [Walapanba] and that it ended in another country but they didn't know that it went north and then it went east and then it went west and then went there. It was sort of filling in the gaps and that was apparent right across that everyone was just having fragments of information and when they came together it was filling in the gaps for one another.

This learning was also characterised as enabling community members to better understand their culture, and further enable the storying of their culture. As a BRA staff member indicated upon reflecting on the *Living Cultures* process: "So a lot of that for [participants] was even going okay, discovering how fragmented some of their stories are and that they need even more information to keep trying to piece it back together to get the right story, to then to be able to pass down."

These findings exemplify how arts-based practices can work as a conduit to facilitate learning about Aboriginal culture and history among Aboriginal and non-Aboriginal people within remote regions of Australia. Connection to culture has been identified as a social determinant of health for Indigenous people (AFN 2013; NCCAH 2009). Specifically, arts-based activities that employ aspects important to Indigenous culture are effective towards health promotion and education initiatives targeted towards Indigenous people (Jersky et al. 2016; Sinclair et al. 2016). Additionally, visiting traditional lands can contribute towards community

well-being and favourable mental health outcomes for Aboriginal people in remote parts of Australia (Johnston et al. 2007). As a part of the *Living Cultures* project, Aboriginal people from Tennant Creek and Mungkarta visited their traditional homelands, and this may encourage favourable health outcomes over time. As an extension to this, the *Living Cultures* project enabled non-Aboriginal people to develop an understanding of the Aboriginal cultural history of Tennant Creek community members. While it is not clear whether or not this would impact the health and well-being of non-Aboriginal people participating in the project, the shared experiences among participants may increase the social capital of both groups and positively impact their health and well-being.

Bonding: Relations Within the Community

Participants indicated that the organisation and facilitation of the *Desert Harmony Festival* has impact on connections and working relationships within the community. Findings under this component of social capital highlighted the complexity that comes with organising and facilitating a festival and empowering community members to connect with the event and with one another. This represents a common challenge in these sorts of community initiatives, where there is a certain level of organisational capacity that is required from an organisation that has the resources and skills to offer this, but that can be perceived by some as ownership of the event. In terms of encouraging strong connections within the community, participants suggested that the *Desert Harmony Festival* results in community members sharing resources and collaborating. For example, a council manager stated:

> There's significant community involvement. The parade itself is really a coming together of a wide range of community organisations and individuals in order to do that. Many of the events have a community aspect to them, that whilst there might professional performers coming in there's an integration into a part of the community or the community in general.
>
> For example, Psychic Circus this year are not only delivering as professionals, they were actually integrated with a local—young children that were

> already involved in that. So every event is extended to have a community aspect, and I think it provides an extraordinary outcome because you're maximising the way in which the resources are used the whole time.

Similarly, a manager working at an NGO within the area also indicated that the *Desert Harmony Festival* is successfully delivered via strong community connections:

> There's been some fantastic events where everybody out there is putting something into the particular event. So it's much more engaging. There was a great one, last year or the year before, a photo event, where cameras went out to all corners of the Barkly Shire and everybody contributed to this display which was all about the Barkly. This year there was photos of people together and different age groups. So there's always preparation for the parade, you know building things for the parade, adornments, themes, banners for the main street, that everybody gets a chance to have a bit of input into. It's built because there's also workshops associated with the festival which engage with different parts of the community…

In contrast, some community members indicated that the organisation and facilitation of the *Desert Harmony Festival* is mainly controlled by BRA and does not involve a significant community involvement, signalling the challenges when working towards community engagement in this sort of setting. As a local manager outlined, there are major complexities when running such a festival in a remote town where significant travel is required for those who live far away, and whole-of-community is challenging to facilitate because of the resources needed. This manager suggested that specifically, those who do not have access to resources may not be able to contribute to the festival organisation to the same extent as those with resources, "The community's involved but it's not all. I mean little bit of, the people that have resources and the people that have vehicles, they involve. The people that don't have resources and the people that don't have vehicles and that, they don't get involved."

There were certainly differences of experiences and perceptions about the realities of what was happening in terms of community engagement, and the ways in which it could be enhanced. A *Desert Harmony Festival* organiser highlighted the complexity of this engagement process, and the

resource implications and realities of being able to involve everyone in this community. As this participant indicated, it needs to be approached in reciprocal ways, where community members feel empowered to contribute. The challenging question for arts organisations is how to facilitate this kind of self-determination.

> Barkly Regional Arts' door is always open for people, and whether or not everyone knows that or not. But if people have questions about being involved, or how they can get involved, people can come to us and ask us, and we don't turn anyone away. So I suppose when people are thinking or mentioning maybe they feel closed off from the festival, there is no reason for them to feel closed off from the festival, they at any point can come and say, they would like to be involved, or they could contribute in any way. We do a lot to extend out to the community and I suppose, yes, for us, we'd like to see a great extension back of people sitting back and waiting to be hand fed or spoon fed about how they can be involved, the door's open there to express how other people would like to be involved. I mean, with this transition phase we'd like to move towards as to how best to do that, then, whether with emails and attending community events and discussions isn't hitting it, then how is it? How to get that message across that that door is open, that two-way street is available at any time?

The importance of such considerations, and the fostering of such bonds within a community, has been shown to contribute to the health of Indigenous and non-Indigenous people (AFN 2013). Connections and relationships within community are characterised as a components of social capital (AFN 2013; Mithen et al. 2015), and as a result have impact on individual health. A growing body of research has begun to establish the importance of social capital on general health. For example, in their meta-analysis of 39 studies exploring the effect of social capital on self-reported health, Gilbert et al. (2013) found that higher levels of social capital increased the odds of having favourable health. In terms of Australia, in their study exploring the impact of social support on the health of 9758 women, Holden et al. (2015) found that after controlling for demographic variables, lower health was associated with lower levels of social support. In terms of the current study, arts-based practices and

the organisation of the Festival, in part, contributed towards relations within this community favourably impacted social capital. As a result, the current study supports the notion that arts-based practices can encourage connections within community and strengthen social capital, and thus may also contribute towards favourable health outcomes for community members.

Bridging: Relations with Other Communities

As our final example, we would like to return to the *Living Cultures* project and consider how it played an important role in bridging relations between Indigenous and non-Indigenous collaborators and community members. Through this project, BRA staff—some of whom are non-Indigenous—developed a stronger understanding of the history of Aboriginal people living within the area. Some of this understanding concerned contemporary events of cultural significance that are currently taking place. For example, a BRA staff member mentioned:

> …said to me and one of the kids repeated to me and was standing at rock hole, he said oh, these stones, like, all those flat granite ones, these weren't here before, when I was here last. What happened was is the Rainbow Serpent came up out of the hole and spread them everywhere. I was like what the hell? You know, like expecting it to be this ancient story that has been kept for millennia. Instead, it's like oh, it's modern day, the snake is moving around. Then the kid said oh the snake…

The knowledge gained by non-Aboriginal community members and BRA employees can contribute towards their understanding of the history of Aboriginal people within the area. This understanding can favourably impact non-Aboriginal and Aboriginal connections and interactions. For example, a BRA staff member indicated that participating in the *Living Cultures* project and learning about country encouraged their stronger understanding of Aboriginal art, and the deeper connection between the arts, and Aboriginal history. When interpreting a visual art piece, a BRA staff member reflected:

> You're in it, you start going okay yeah, I can see that now, I see where that's coming from and I can see why those particular colours are being used predominantly and the same with […] drawings over there, I can see the landscape in those colours now, not just she's just chosen some random colours. That, for her, is really strong when she thinks about country.

Finally, participants indicated that the exchange of cultural knowledge between Aboriginal and non-Aboriginal persons is a worthwhile process that favourably impacted cross-cultural connections. Consequently, it was suggested that all BRA staff should participate in a similar project:

> time wise and recruitment wise … it's so important that we all experience these things and add to the depth of knowledge and the depth of perceptions and ways of working that that knowledge has to be protected and preserved and strengthened and passed on ourselves. In other words, we're learning a lot from that process that we start out investigating it, looking at it and appreciating it but actually what you do find out in the short term outcome and the long term outcome is that we learn so much from that ourselves.

The *Living Cultures* project has potentially strengthened relations between Aboriginal and non-Aboriginal participants residing in Tennant Creek through their shared involvement in learning experiences concerning Aboriginal culture and identity. Strong cross-cultural relationships between Aboriginal and non-Aboriginal people in Australia have the potential to encourage solidarity between both groups, and this can be a step towards a collective working agenda for positive social change (Land 2012). Furthermore, the strengthening of cross-cultural relations may increase social participation and integration within the community, which can have a positive impact on community health and well-being outcomes (Schulz and Northridge 2004). The findings highlight how arts-based activities can be a catalyst for positive cross-cultural relationships between Aboriginal and non-Aboriginal people residing in remote regions within Australia, and this may lay the foundation for positive community health and well-being outcomes.

Conclusions

This chapter has aimed to show the potential of viewing arts participation through the lens of Indigenous SDOH. We have argued that recognising Indigenous SDOH requires use of specifically Indigenous and anti-colonial conceptual frameworks. The insights shared in this chapter about the creative and community-driven processes of making a documentary on country or running a community festival will resonate strongly with those who work in the arts, but when viewed through a SDOH lens, these insights offer an additional dimension that speaks to the influence such activities can have from the individual to the community and organisational level. As the brief illustrations in this chapter have shown, participating in a documentary process designed to promote the continuation of culture and participating in a community festival designed to bring cultures together can play an important role in the health and well-being of First Peoples and culturally diverse community more broadly. It is our hope that this chapter will hence motivate other researchers, arts practitioners, communities and policy makers to explore Indigenous conceptual frameworks for mapping and responding to the SDOH and well-being.

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Achieving Health Equity and Social Justice Through Music: Music as a Global Resource

Barbara Hesser and Harry N. Heinemann

This chapter discusses the history and mission of Music as a Global Resource, Inc. (MAGR); a worldwide initiative to promote and facilitate the use of music to address social, economic and health issues in both developed and developing countries, thereby significantly enhancing the quality of life. Both the research and experiences of existing on 'the ground' programmes show music to be a potent, cost-effective tool in five major areas: sustainable community development, mental and physical health issues, work with trauma survivors, lifelong learning and peace building.

Music is a universal language and a natural resource for all people throughout the world. All cultures have music and throughout time, it has been understood as a vital force of self-expression, communication, empowerment and healing, as well as a release from the daily tensions of

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life. Music is a direct and potent tool in sustainable urban and rural community building and the healing process of individuals and communities who have been emotionally and physically afflicted.

Today's world is in dire need of creative solutions to the challenges of sustainable community development, trauma, health and well-being stemming from a host of factors such as poverty, disease, economic uncertainty and war. Each human being should have the opportunity to attain his or her optimum health potential and have social justice. These opportunities can be seen as fundamental human rights that music can uniquely facilitate.

By 'health equity', we are referring to attaining the highest level of health for all people. This is considered, by the World Health Organization (http://www.who.int/about/mission/en/), to be a fundamental right of every human being regardless of race, religion, political belief and economic or social condition (World Health Organization 1946). Social Justice describes a society that challenges injustice at all levels while valuing diversity. All people have the fundamental right to equitable treatment, support for their human rights and a fair allocation of community resources regardless of background or group membership. Factors such as gender, sexuality, religion, political affiliation, age, belief systems, disability, social class or socioeconomic circumstances should not be disqualifying.

The chapter will offer some exemplar projects that have been selected from 'Music as a Global Resource: Solutions for Social and Economic Issues' (Hesser and Heinemann 2015) to illustrate how musicians, music educators and music therapists around the world use music. These projects have been at the forefront of discussions of music as a 'global resource' in relation to the UN Millennium Development Goals 2000–2015 (MDG). Lastly, future directions for policy and practice will be explored.

The UN Millennium Goal Initiative

Through its 2000–2015 Millennium Development Goals (MDGs) initiative and the current 2016–2030 Sustainable Initiative, the UN has been at the forefront in seeking to achieve both health equity and social

justice for people throughout the world. In 2000, all member nations agreed to support and make significant progress in achieving eight goals. As stated by Ban Ki-Moon, Secretary General of the UN in his foreword to the MDGs outcome report to the member countries in 2015:

> The landmark commitment entered into by world leaders in the year 2000 to spare no effort to free our fellow men, women and children from abject and dehumanizing conditions of extreme poverty was translated into an inspiring framework of eight goals and, then, into wide ranging practical steps that have enabled people across the world to improve their lives and future prospects. The MDGs helped lift more than one billion people out of extreme poverty, to make inroads against hunger, to enable more girls to attend school than ever before and protect our planet. (The Millennium Development Goals Report Development Report UN 2015, p. 3)

The eight goals that Secretary Ban Ki-Moon refers to would be basic to any initiative that addresses health equity and social justice issues. They include the following goals: GOAL 1—Eradicate Extreme Poverty, and Hunger; GOAL 2—Achieve Universal Primary Education; GOAL 3—Promote Gender Equality; GOAL 4—Reduce Child Mortality; GOAL 5—Improve Maternal Health; GOAL 6—Combat HIV/AIDS, Malaria and Other Diseases; GOAL 7—Ensure Environmental Sustainability; GOAL 8—Develop a Global Partnership for Development (The Millennium Development Goals Report UN 2015, pp. 4–7). The report goes on to present the extent to which each goal was achieved over the 15-year period. The results are impressive. For example, extreme poverty in the developing world has dropped from nearly half of the population in 1990 to 14 per cent in 2015. The number of people in the working middle class has almost tripled between 1991 and 2015. The primary school net enrollment in the developing regions has reached 91 per cent in 2015. In 2015, women made up 41 per cent of paid workers outside of the agricultural area. The global under-five mortality rate has declined by more than half between 1990 and 2015. Since 1990, the maternal mortality rate has declined by 45 per cent worldwide (UN 2015, pp. 4–7).

Over the 15 years of the MDGs, clearly significant achievements have been made on many of goal targets. However, although these achievements

have been impressive, progress has been uneven across regions and countries. In 2016, all member countries of the UN agreed to adopt a new and expanded set of goals to stimulate and guide the development efforts for the new 15-year period. Seventeen Sustainable Development Goals (SDGs) now represent the targets for 2030. The SDGs include the original eight MDGs, while adding nine new goals. The new SDGs include Clean Water and Sanitation, Affordable and Clean Energy, Decent Work and Economic Growth, Sustainable Cities and Communities, Climate Action and Life Below Water and on Land (United Nations 2016).

History of Music as a Global Resource, Inc.

The Music as a Global Resource (MAGR) initiative was first launched through the International Council for Caring Communities (ICCC) as one of its creative and innovative cross-sector solutions to solving world economic and social issues and helping member nations meet the UN Millennium Development Goals (MDGs). ICCC is a not-for-profit organisation that has Special Consultative Status with the Economic and Social Council (ECOSOC) of the UN. ECOSOC serves the UN as the central forum for discussing international economic and social issues, for formulating policy recommendations and implementing solutions. ICCC's mission is to serve as a bridge linking government, civil society organisations, the private sector, universities and the UN in their efforts at sparking new ways of viewing an integrated society for all ages.

In 2001, ICCC began addressing the MDG challenges being faced by member countries through a series of unique High-Level Working Sessions as a part of the UN International Year on Dialogue Among Civilisations established to foster global cooperation and understanding. On December 6, 2001, the ICCC hosted the first groundbreaking symposium on the interrelationship of *Music, Technology, Culture and Healthcare*. The meeting brought together experts to explore the use of music together with information and communications technology (ICT) to enhance community health, well-being and the quality of life. Attending this dialogue were members from missions, UN policymakers, non-governmental organisation (NGO) representatives and medical and

arts practitioners. The goal was to develop a cross-disciplinary, result and action-oriented mindset to address the MDGs, in the areas of health, education, habitat and peace, using MAGR. Part of the impetus for this far-ranging exploration was the awareness that to be economically sound and productive, the global community must also be healthy—mentally and physically.

Since 2001, this creative holistic approach to solutions continued and deepened through an ongoing series of high-level dialogues. Between 2001 and 2016, seven more High-Level Working Sessions (2005, 2007, 2008, 2009, 2010, 2011 and 2012) have been held at the UN Headquarters in New York City. Attending these sessions were international decision makers and experts from government, representatives from international organisations, local authorities and the private sector, including the music industry, academia and health organisations. Musicians from the fields of therapy, education, performance, the music business and technology have taken part.

So much interest and energy was generated by the High-Level Working Sessions in 2009, a not-for-profit organisation, Music as a Natural Resource, Inc. (later to be renamed Music as a Global Resource, Inc., [MAGR]), was formed to promote and facilitate using music to address social, economic and health issues in both developed and developing countries, thereby significantly enhancing the quality of life. MAGR's mission includes five major goals:

1. Identify and disseminate information on existing exemplar programmes from around the world
2. Strengthen existing programmes
3. Facilitate the development of new and sustainable programmes
4. Promote basic and applied research on programme outcomes
5. Provide a robust web site that is a comprehensive resource for a variety of audiences interested in significantly enhancing the quality of life in both the developed and developing world through using the power of music. Users would include operational programme personnel, decision makers from government, the private sector, foundations, civil societies, not-for-profit organisations, educators and the general public, among others.

Music as a Global Resource Compendium

One of many recommendations coming out of the UN working sessions was that a comprehensive research initiative be undertaken to identify exemplar projects in both developed and developing countries that utilise MAGR. As discussed, this Compendium would help promote sustainable initiatives on the national, regional and local levels. Gathering and publishing success stories would provide examples for addressing the UN MDGs. Four editions of *Music as a Global Resource Compendium: Solutions for Social and Economic Issues* (Hesser and Heinemann 2009, 2010, 2011, 2015) have been developed in response to the recommendations from these dialogues.

MAGR's mission is focused on promoting the development of sustainable initiatives on the national, regional and local levels. These projects would not be possible without the unique collaboration and partnership with government and the private sector. One of the goals of the Compendium is to create connections among projects, as well as network successful and sustainable music initiatives from around the world, together with developing new, sustainable projects. This international exchange has begun and is greatly facilitated by ICT. New projects have been and are being developed, collaborations among projects have formed and projects are becoming more sustainable through shared strategies. Project directors are eager to exchange ideas and share what has been learned.

The authors (who are also current MAGR board members) led this research mapping project. Recognised experts from the fields of music therapy and music education, as well as the music industry, assisted in this effort by identifying projects and helping to establish the criteria for determining exemplar projects. An editorial committee was formed with the co-editors and three associate editors; one music therapist and two music educators. Experts from the five regions of the world (music therapists, music educators, musicians as well as multidisciplinary participants from the many UN dialogues) were contacted to recommend successful projects that they considered representative of MAGR, and to connect with these projects and their directors. This was an informal

vetting process by experts in the field who were familiar with the projects and determined that the projects published in the Compendium were exemplar projects, presenting a wide range of examples on how music was being successfully used to address social, health and economic issues.

A template was created to present the projects and each project was written up and titled in coordination with the project directors. Projects that were selected are described in terms of goals and objectives, and how music is utilised to meet those goals, research studies, programme evaluation procedures, publications, websites, video resources and contact information for easy communication and networking. A qualitative analysis was made based on the goals of the projects collected and broader sections were created. These represent five major areas of publication: Music for Sustainable Community Development, Music for Mental and Physical Health, Music for Working with Trauma Survivors, Music for Life Long Learning, and Music for Peace Building.

The fourth edition of the Compendium now includes over 105 projects from 45 countries representing all five regions of the world: Africa, Asia, Australia/New Zealand, Central America and the Caribbean, North and South America (Hesser and Heinemann 2015). These are powerful examples showing how music can help solve the most difficult problems that face human beings: mental and physical illness, poverty, natural disasters and war. It also highlights music initiatives being used for prevention, learning and peace building.

Dedicated music therapists, music educators and performing musicians, direct the projects. Some projects work with socially disadvantaged and marginalised groups, while others work with the general population and some projects integrate both. Some projects focus on the innate value of learning and making music while other projects first emphasise the desired goals and then create the music and music-making activities to achieve these goals. The programmes use a multisector approach. Programmes typically structure their projects with community organisations and/or governmental partners to develop creative ways to highlight a social problem and promote solutions.

Projects Using Music for Social, Health and Economic Issues

The following are descriptions of several exemplar projects from different countries and regions that demonstrate the use of music to address health, economic and social issues. In order to show the breadth and scope of the work being done, the write ups in this chapter are by necessity shorter than in the fourth edition of the MAGR Compendium (Hesser and Heinemann 2015). There you can find a fuller description of each project as well as information on the current status, publications, videos, web sites and contact information. The Compendium can be accessed on the MAGR website, musicasaglobalresouce.org. This web site also contains a five-minute video, in several languages, describing a number of projects.

Music for Working with Trauma Survivors

The MAGR Compendium has many projects that are models of how to use music when a disaster takes place in a country, whether it is from natural or human causes. Natural disasters also take their toll on the people of their regions. It is estimated that 89 million people have been affected in 2015 by natural disasters (Global Humanitarian Assistance 2016). Examples of music projects with survivors of natural disasters include the Sichuan Earthquake in 2008 and the Chilean Earthquake of 2010. Lessons learned by the people involved in these music projects have been shared globally to help in current crises as they occur. The Commuon project that follows is an example of this.

One of the most pressing and heartbreaking problems in our world today is the enormous refugee crisis. In 2015, approximately 65 million people were displaced by conflict in their countries, the highest level ever recorded (Global Humanitarian Assistance 2016). These people are fleeing from torture, militias, bombs, sexual abuse, persecution and hatred. The UN, governments and humanitarian organisations are all coming together to address this enormous problem. In addition to the following projects, music was used to help trauma survivors in the aftermath of the

attack on the World Trade Centers in New York City in 2001. We also have examples of using music from the Irish, African and Middle East conflicts. The Berlin Center for the Treatment of Torture Victims and Musicians Without Borders (MwB) are example included here.

The Berlin Center for the Treatment of Torture Victims—Germany

Many refugees have fled to Europe, particularly Germany. Those people who managed to find their way to Germany are from Syria, Chechnya, Turkey, Afghanistan, Iran, Iraq and more than 50 other countries. The 'Berlin Center for the Treatment of Torture Victims' is using music therapy in treatment and support of 500 children, adolescents and adults from 50 countries. The Center's multidisciplinary team is specialised in medicine, psychotherapy, psychology, physiotherapy, social work and creative therapies. This vulnerable population often faces difficulties in dealing from their traumatic experiences. Due to the severity and time of exposure to traumatic experiences, many of the clients develop a complex post-traumatic stress disorder (PTSD). They also find themselves with an uncertain future, especially regarding whether or not they will be granted asylum in Germany. They suffer from various symptoms and difficulties, including concentration difficulties, intrusions, dissociation, sleep disturbances and nightmares, anxiety, avoidance, withdrawal and social isolation, affect regulation and a low self-esteem.

Music therapy at the Center aims to strengthen individual resources and help to reduce trauma-related symptoms. Music is a natural resource with displaced people where the dignity of human life and the human rights of each and every individual can be respected regardless of ethnic heritage religion, gender, social status or political conviction. Music offers ways to explore a safe space for creative expression and regain a sense of self. Patients become involved in musical activities that, over the therapeutic process, gradually help to re-establish and stabilise resources. These enable them to reduce stress and regain empowerment and self-regulation and to rebuild trust in interacting with others.

Music therapy sessions, both individual and in group, include activities such as musical improvisation, structured activities, music listening, song writing, musical movement and dancing, and musical storytelling. Cultural backgrounds often reflect in the musical expressions and provide opportunities to share each other's traditions.

More recently in 2015, a music group has been set up for children from Syria whose parents participate in an acute consultation project of the Center. These families have only recently arrived in Germany; therefore, they are all living in refugee hostels. The music group aims to offer a day-structuring activity and to support the adaptation process and psychosocial well-being of the children.

Commuon The Big Band—Japan

The third edition of the MAGR Compendium included 'Commuon the Big Band' project located in Sendai, Japan. Originally designed as a Sustainable Community Development project, the not-for-profit Organisation to promote Community Music Therapy (Commuon) had two missions. One was to encourage the public to enjoy music more and the other was to provide the opportunity for people with and without disability to play music together. 'Commuon the Big Band' included both disabled and non-disabled people. The music was specially arranged so that all members could participate by playing musical instruments they liked or by singing. 'Commuon the Big Band' consisted of about 30 members with various levels of musical skills from total beginners to professional musicians.

Then on Friday, March 11, 2011, the Japan Earthquake happened. It was the most powerful earthquake ever measured in Japan, breaching a 9.0 magnitude. The tsunami that followed inundated a total of six prefectures on the Pacific coast of eastern Japan. The earthquake and nuclear accident devastated the towns and cities where the Commuon activities take place. All members of the Commuon Big Band and the space where the band met were impacted. Some members received tremendous damage from the tsunami. Some were unable to attend activities because the railroad had been washed away. Some could no longer come because their work place was changed. Some moved away from the area due to the

nuclear contamination concerns. Normal activities were unable to resume until May 2011.

MAGR with other music therapy associations in the United States and Japan reached out immediately to Commuon's founder and director to provide assistance and supervision of the music therapist in charge of the project there. The model from previous natural disaster music projects was utilised. Commuon the Big Band has again become a place for members to come together, play music and support each other, not only as musicians but also as friends. The priority now is to sustain the activity, to keep the rehearsals constant, providing a place for the members to gather together to play music. Commuon Big Band participated in the Tricolore Music Festival that took place in Ishinomaki, where the tsunami had washed away part of the town. Ishinomaki is also a town where some of the members with disability live. Now it means a lot more than just participating in the festival. They are hoping to use music to help revitalise the town.

Musicians Without Borders

MwB is a multinational project that has projects in Kosovo, Occupied Palestine Territories, Rwanda, Northern Ireland, Bosnia and Herzegovina. Their slogan is 'War Divides, Music Connects'. The goal of the project is to use music to connect communities, bridge divides and heal the wounds of war. In communities affected by armed conflict, MwB collaborates with local musicians and cultural, development, peace and human rights organisations to develop sustainable, long-term music programmes. MwB offers training in community music leadership and contributes to conferences and expert meetings. MwB targets all generations in all musical genres, depending on local needs and demand. Programmes are designed for local control and sustainability. Since 2008, MwB offers a wide range of programmes aimed at social change and peace building. A few of the MwB projects are as follows.

- In Palestine, these include 'The Rap Project', the 'Musical Playground Project', 'Deaf & Proud', and 'Samba for Social Change'.

- MwB's Rap Project uses the international language of disenfranchised urban youth for social change, training Palestinian rappers in leadership, beat-making and recording. The rappers teach teenagers to write, record and perform their own rap songs, expressing their hopes and dreams through music.
- The Musical Playground prepares MwB's community music trainees and rap leaders to bring music to refugee camp schools, involving all children, parents and teachers in creative, inclusive and celebratory daylong musical events.
- Deaf & Proud brings deaf and hearing youth together through music activities, providing a safe space for them to share their experiences and raise awareness and create sustainable support systems for one of Palestine's most vulnerable populations.
- Samba for Social Change coaches Palestinian drum groups from refugee camps and villages surrounded by the wall. Combining samba with Arabic percussion, the drummers connect people with joyful, contagious and empowering rhythms during community events, nonviolent vigils and percussion workshops for youth.

In Mitrovica, Kosovo, the Mitrovica Rock School's goal is to unite youth in a divided city through rock music. In Mitrovica, the conflict between Serb and Albanian communities still continues with barricaded bridges over the Ibar River, increased tensions and regular outbursts of violence. Since 2008, MwB and partners Community Building Mitrovica and the Fontys Rock Academy have successfully run an interethnic youth project, the Mitrovica Rock School, where young people from both sides of the ethnically divided city meet as musicians and aspiring rock stars. Local rock musicians and teachers work to restore the city's shared rock music tradition and stimulate a culture of respect through music. The bands work together regularly via the Internet, writing songs and producing demo recordings.

In Bosnia and Herzegovina, 'Woman to Woman' is a project designed to bring music back into the lives of genocide survivors. Woman to Woman trains local workshop leaders to lead music and dance workshops and activities with women affected by traumatic experiences of violence, dislocation and loss of loved ones during the ethnic 'cleansing', especially in the Srebrenica region.

Sustainable Community Development

Building healthy communities that are sustainable is a primary goal of our time. Communities are seeking a better quality of life for all its residents regardless of age, disability and economic status. MAGR is looking at how music and the arts can have an impact on disenfranchised people of all ages, youth at risk, cultural identity and economic well-being. We are looking at how music can help cultivate local talents and empower people to become more involved in their community. Many international music projects offer youth an alternative to street life and open possibilities to escape poverty, hopelessness and joblessness. Examples from the five regions of the world are available in the Compendium. Here we have focused on two important projects 'SVARAM' from India and 'Batuta' from Columbia, though many similar projects for disadvantaged youth exist around the world. These include the 'Manuang String Project', 'Field Band' and the 'Keiskamma Music Academy' in South Africa, 'CEDROS' in Mexico, Gustavo Dudamel's 'Youth Orchestra of Los Angeles' (YOLA) in the United States to name a few.

SVARAM

SVARAM is an outreach project of the International Community of Auroville in India dedicated to the improvement of its local, indigenous neighbourhood in the surrounding villages of Tamil Nadu. This vocational education, cultural training and employment activity helps to develop local indigenous youth into skilled crafts people with both artistic talent and viable employment skills. Initiated as a development project for 'youth at risk', the original trainees are currently raising families and stepping into responsible positions in their homes and village communities. Individuals who experienced illiteracy issues are now senior craftsmen/women meeting daily challenges in the management of instrument production, training of younger apprentices and promoting the development of organisational life skills.

SVARAM offers vocational training apprenticeships in musical instrument building for the youth of these villages. The training programme

focuses on practical skills as well as theoretical knowledge in the fields of traditional and new instrument making and repair, instrument design and material studies, machinery and tuning, musical theory and acoustics, mathematics and technical drawing as well as organisational and life skills. In addition to the artisan skills, young people are exposed to traditional performing arts and crafts and develop an enhanced awareness of their rich Tamil heritage and Indian culture. SVARAM also supports social outreach programmes sharing acquired skills in village cultural education and participates in local, national and international cultural programmes.

Having fulfilled its first ten-year plan of establishing a sustainable income generating project, operations are being expanded. To bring all the aspects of their programme into a comprehensive holistic model, the concept of a SVARAM campus is now in its planning phase. Land has been made available by the Auroville Planning Board. Fundraising efforts are underway, and support is being sought to make this crucial expansion to realise full potential of SVARAM possible.

Fundación Nacional Batuta

In Columbia, 'Fundación Nacional Batuta', a public/private foundation, was created in 1991 by a joint effort between the national government of Colombia and the private sector. Its programmes were inspired, in part, by the National Youth and Children Symphonic Orchestras Organization of Venezuela (*El Sistema*).

Batuta offers music lessons and group music-making activities to children, adolescents and young adults that contribute to the comprehensive development and improvement of the quality of life for children, young people and their families in vulnerable areas, through the construction of a social fabric to open spaces of reconciliation and coexistence. They help to build useful individual capacities for active participation in society give all children, young people and communities access to cultural offerings, promote social integration, strengthen cultural and educational processes in the country and promote cultural diversity. Many of the children served have suffered directly from forced displacement associated with violence. Batuta also works with children who belong to families that have been victims of armed conflict and those that come from extreme

poverty and have two or more of their basic needs unsatisfied (health, education, employment of their parents, shelter, nutrition, etc.). These conditions have affected children's physical and emotional development and, as a consequence, their academic performance.

Batuta has many diverse programmes including Music Stimulation (children between two and four years old), Musical Transitions (children between four and six years old), Music Initiation Program (children between six and sixteen years old), Choir Training (boys, girls, adolescents and young adults); Symphonic Training (boys, girls, adolescents and young adults) and music education for children and teenagers with disabilities.

A national effort that addresses social justice issues, Batuta is considered one of the largest arts programmes of any kind in Latin America and is the largest in Colombia. It has gained international attention. Currently, it has centres in all 32 departments (states) of the country, serving approximately 39,000 children and adolescents.

Music for Mental and Physical Health

Music is playing an increasing role in addressing the areas of mental and physical health and the creation of optimal health for all people. The Compendium has projects that address many kinds of physical problems such as such as cancer, Alzheimer's disease, serious burns and blindness through music. Adults and children with serious mental health issues, as well as special needs children, also benefit. Music therapists often play a critical role in creating and running these projects, because of their special training to address these issues.

The Louis Armstrong Center for Music and Medicine

In the United States, 'The Louis Armstrong Center for Music and Medicine' is a model for the use of music therapy with a large variety of medical issues. The Louis Armstrong Music Therapy Department, located at Mount Sinai Beth Israel Medical Center in New York City, has provided a broad

range of services throughout five medical centres in Manhattan (and within the community) for the last 21 years. This programme is a full in-hospital, out-patient and community-based programme that services a variety of populations. Music therapy is used throughout the hospital to enhance, restore or change medical, physical and/or psychosocial functioning. The team is trained to offer the most current treatment approaches including clinical improvisation, music meditation, pain management, sedation, end-of-life and breathing modalities. The music therapists conduct daily sessions with patients in many areas of the hospital: Music Psychotherapy for musicians, Neonatal Intensive Care Unit (NICU), Pediatrics, Family Medicine, Maternity, Oncology, Intensive Care Units, Peter Kruger Clinic for Infants, Children and Teens with Emotional and Developmental Delays, HIV, Orthopedics, Hospice, Pain Medicine and Palliative Care.

The mission of the programme includes conducting research and publishing material to further advance the care provided to patients and enhance the practice of medical music therapy. The team conducts research in conjunction with doctors and nurses, providing the utmost care and attention to the patients and families served. Current ongoing research projects involve mixed designs that provide for quantitative and qualitative data collections. The studies include the following:

- Multi-site Neonatal Intensive Care Unit (NICU) Study (Loewy et al. 2013; Loewy 2015)
- Clinical Music Improvisation in Chemotherapy Study
- The Effects of Music Therapy in the Recovery of Patients Undergoing Spine Surgery
- Music Therapy and the Effects of Noise in the Surgical Intensive Care Unit (SICU)
- Music Therapy during Simulation in Radiation Therapy

Dissemination of the Compendium

MAGR feels that it is important to share these exemplar projects and spread the knowledge of how music can be used for health, social and economic issues that face our world today. All four editions of the

Compendium have been broadly disseminated by distributing printed copies to Ambassadors and government leaders, UN missions and UN policymakers, among others. E-mail copies have been sent to all project directors and they have been asked to share them widely. The 2010, 2011 and 2015 Compendiums have been posted on a number of web sites including the UN Public Administration Network and the ICCC. Five-minute videos presenting several representative programmes have been produced in English, Spanish and Chinese for use at conferences and meetings. These videos have also been posted on YouTube. Both the Compendium and the videos are available on the MAGR web site (musicasaglobalresource.org).

Towards the Future

The experiences of MAGR in working with project directors to compile the information presented in the 'Music as a Global Resource' Compendiums clearly underscore the important contributions that the power of music makes in helping to achieve health equity and social justice on the local, regional and national levels. But, while the outcomes of these projects are both impressive and significant, in the main, their impact on organisational and political decision makers is still very limited. Expanding the use of music to help address critical issues in achieving health equity and social justice for all people becomes a very important objective as one looks to the future. A three-pronged strategy is being proposed.

The first component of the strategy has already been discussed as a part of the mission goals and operational plans for MAGR. Having a robust, web-based platform would provide the means to strengthen and expand existing programmes while also being an invaluable resource for new programmes. It would also serve individuals and organisations interested in the power of music.

Reaching out to major international membership-based organisations such as the European Union (EU), the Organization for Economic Cooperation and Development (OECD), the Organization of American States (OAS), the World Bank, the Inter-American Development Bank, among many others to introduce the potential of music to address critical

quality of life issues is a second component. All of these organisations state in some format the mission of achieving health equity and social justice for all people as major goals. A series of comparable High-Level Working Sessions for organisational decision makers and representatives from the member countries and other interested individuals could have a profound impact on expanding the use of music as a solution for addressing health, social and economic issues. Further, it is interesting to note that many of the member countries of these international organisations already have successful functioning music projects.

Many professionals working with music may not be aware of the impact that music is having and its broad potential in addressing critical issues stemming from attaining health equity and social justice for all people. Building awareness and obtaining their involvement is the third component of the futures strategy. In addition to this, students at both the undergraduate and graduate levels working towards their professional degrees in an area of music may also be unaware of how music power is helping to solve health, social and economic issues. Working with university and college faculty, together with professional associations, we are proposing that a course be developed that focuses on MAGR.

The success of the UN original MDGs initiative has led to a significant expansion to the numbers of people whose quality of life will greatly improve over the next 15 years through the SDGs. This effort together with the recommendations being proposed in this paper will result in making MAGR a major tool to help achieve health equity and social justice for all.

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Music as a Global Resource Compendium: Solutions for Social and Economic Issues, 4th edition recently released in Fall 2015.

Harry N. Heinemann joined LaGCC prior to its opening in 1970 and had been responsible for developing the college's mandatory cooperative education programme (integrating work experience into the curriculum for academic credit in all departments) as well as the institution's international programme initiatives. Over years, Heinemann was very active in the Cooperative Education Association serving as vice president of finance, editor of the CEA's referred journal and conference coordinator for the second-world cooperative education conference. Heinemann received the Dean Herman Schneider Award in recognition of his contributions to cooperative education and has been installed into the University of Cincinnati's Hall of Honor for Cooperative Education professionals. He was also a Sir John Reed visiting fellow at the Victoria University of Technology. Under Heinemann, LaGCC developed a wide scope of international initiatives involving institutions and organisations in various countries including the Dominican Republic, Columbia, Peoples Republic of China, Australia, Singapore and Morocco. Heinemann has presented at numerous conferences throughout the world and has published in the areas of community colleges, cooperative education and returns on public investments. He has a PhD from the University of Pittsburgh in Management, a Bachelors of Mechanical Engineering and a Masters of Business Administration, both from the City College of New York and has served on numerous Boards of not-for-profit organisations. At the present time, Heinemann is President of Creative Arts as a Global Resource, Inc. (CAGR) Music as a Global Resource is an initiative of CAGR.

Medical Ethnomusicology and the Promise of Music, Health and Healing

Benjamin D. Koen

Introduction

Now is a time of unprecedented change in all areas of human life. Historically, academia has often been slow in keeping up with change and promoting research, teaching and creative activity that either facilitates the positive changes or transformations needed, or challenges the ill-structured systems that produce negative effects in society and perpetuate a culture of mediocrity, unmindfulness, illness and disease. Over the last decade, however, there has been a growing sense and compulsion among researchers, practitioners, scholars, educators and performers, not only to do work that contributes knowledge by exploring little or unknown areas of music and human life (which conventionally has been viewed as being sufficiently valuable in and of itself), but also to go further by ensuring that we strive to discover new knowledge that is also practically applicable to improve the lives and well-being of individuals and society.

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The theme at the heart of this volume, "music and health for all" is directly and unapologetically compelled by the sensibility and urge to benefit humanity by doing work that is relevant and meaningful, requiring a new mindset—one that is integrative, holistic, imaginative and entrepreneurial. This poses profound ontological and epistemological questions to each of us as individuals engaged in this discourse, and more broadly as participants in and potential transformers of the institutional structures within which we often work. This sensibility is mirrored in several initiatives that share the same concern to reach beyond disciplinary borders or academic conventions to serve and improve the lives of a far greater number of people than is typical.

For instance, numerous universities now offer free online courses worldwide for credit; the non-profit Khan Academy has created a new platform for universal education free of charge; developments in numerous fields outside of music are becoming increasingly aware of music's potential role in health, healing and well-being; and developments in the music academy that have expanded our awareness of our ability to improve human health and life include a broader and deeper focus on medical, cognitive and applied ethnomusicology; music and community engagement; and music and sustainability and development, among others.

In addition to these developments in music (and of course those that are ongoing in music therapy, dance therapy and expressive arts therapy), all areas of music and the arts can have a part to play in music and health for all. For those areas in music not directly aligned with health, wellness and healing, it might require more imagination to envision what role can be played. Nevertheless, since music itself is affective and automatically effects change in the multi-dimensional complex that comprises a human being, its potential to be directly and more fully engaged to support health and well-being, or facilitate healing transformations, is ever present. Each of us who works in any area of music is thus part of the discourse to some degree and, at the very least, has a responsibility to become more aware of music's wide-ranging relationship to human wellness and healing and include this stream of expanding knowledge into our systems of education.

In hand with the above-mentioned developments is the recognition of the functional role that culture plays as an affective frame within which any potential benefit or harm can be facilitated or limited, and which therefore must not only be considered when conducting research, engaging community or applying new knowledge, but rather, culture must be central to our endeavours whether we are medical ethnomusicologists or working in any area of music or health.

With these points in mind, this chapter is about possibilities, programmes and progress. It suggests a model for research and applied practice as well as an agenda for the future of medical ethnomusicology that aligns with broader movements and concerns. In addition to developing further medical ethnomusicology as a distinct field, I also propose that it form a required component of degree programmes in music, as well as an optional focus track within each programme.

Potentialities and Possibilities

The theme of music and health for all not only raises the issues of health equity, but in one sense raises broader issues about music's potential to effect change, both positive and negative. I have never had the experience of someone telling me that they do not recognise music's power to effect change in their own lives. However, most people seem to put a cap on what that potential is or could be in their minds and experience. That is to say, people overwhelmingly recognise music's potential to effect change to a degree, however, when they consider the possibility of music's power to participate directly and consciously in healing transformations, or to engender health and wellness, either through direct intervention in the biopsychosocial-emotional-spiritual complex of a person's being, or more subtly by shaping or influencing one's knowledge, mind, beliefs, identity, character, worldview or behaviour, often there is a psychological limit that keeps the imagination at bay. Music's potential then stays within the confines of what people perceive as possible, which is based on either their knowledge, experience or their imagination. Broadening the sphere of possibilities then is one area where medical ethnomusicology plays a

significant role by embracing all expressions of music's power to heal or create health in any cultural or clinical context. *The Oxford Handbook of Medical Ethnomusicology* (Koen 2008) is an early example of the field's already wide-ranging purview, concerning but not limited to a host of diverse contexts, issues and practices. A few defining points are worth mentioning here.

Medical Ethnomusicology

The term medical refers to that which increases health, well-being, balance or wholeness; facilitates healing or cure; and redounds to the well-being of the individual, group, society or humanity. It is not limited to a conventional biomedical or mechanistic definition. Notably, ethnomusicology is not a singular field with respect to being either focused on research or application—it is both. Moreover, it is equally a field of performance. Hence, medical ethnomusicology is a field of research, applied practice and performance concerned with health, healing, wellness and well-being through music, sound and related practices and phenomena. It is not only concerned with how music and the expressive arts can participate in health and healing, but also how they relate to illness and healing etiologies.

As a field, medical ethnomusicology can be described as an open circle that is not limited by academic conventions and, as such, is keenly interested in as many voices as possible participating in the discourse about music's role in health and healing. From the master musician-healer and patient who cure illness together, to a child who experiences music's transforming power for the first time, to exploring how music effects changes in human neurophysiology and immune function, to music's role in creating community, promoting human rights, social or political change, to music's inherent potential to engender health in daily life, to the dynamic relationship among music, psychological flexibility and entrainment, to musical improvisation and transcendence, to music that is potentially embedded in deep structures of human physiology or the far reaches of the cosmos, and myriad other ways that music moves through us and we are moved by it, the field of inquiry, application and performance that is open before us is teaming with potentialities.

In addition, medical ethnomusicology is not limited in its approach, rather it employs methods and techniques that are most relevant to the questions posed; methods that can draw from all areas of music and the arts, social sciences, health sciences, physical sciences and the humanities. Key elements of the new approach are worth mentioning here as a kind of primer for future considerations as the field develops further.

Conceptual Frames for Research and Practice

To approach our work holistically, I suggest a tripartite conceptual model that has two aims: (1) to provide a way to better theorise music's power in healing, health and wellness from the local to universal levels; and (2) to provide clear paths of applying in practice, performance, research and treatment those aspects of sound and music (and related practices) that engender health and wellness, and that can facilitate healing.

The aim here is to provide scope and language that can stimulate our work and enable us to better articulate how the often elusive and affective power of music functions in diverse cultural and clinical contexts. As we are able to speak and write about music, health and healing with more acuity, clarity and specificity; our research, practice, performance and teaching will improve and lead to new questions, trajectories and discoveries. That being said, at the outset I feel compelled to recognise what I am sure is one of the key reasons that the readers of this volume are involved in music—a reason that might seem to be in conflict with the notion that we need more specificity into music's potential power in health and healing. Namely, that music's health supporting and healing power lies in the mystery as it were, or the ineffable affect that can subtly or manifestly effect changes in health. While that could very well be the case, I suggest that the mystery itself has no end, and that by better articulating its nature we can better understand how it functions in relation to life, health and healing; which will propel us forward into dimensions and considerations we cannot yet conceptualise at this present stage.

> The advancement of human knowledge, both individual and collective, devolves from the dynamic interplay of two complementary processes of

> consciousness: experience, and conceptualization. Throughout life, consciousness accumulates experience, either incidentally or by design, and then endeavors to represent, interpret, and apply it to prediction of, or accommodation to, future events. (Dunne and Jahn 1995, p. 4)

The three-part model I propose has a cultural component, a holistic frame that relates music to health and healing, and universal principles and processes that undergird music's functional ability to engender health and effect healing. The model is derived from my own research and diverse cultural and scientific models concerning the nature of health, healing, music and sound.

Figure 1 is a graphic of the dynamic relationships among the three areas of music, the human being and health and healing. It shows how the three areas share the same five factors (physical, psychological, social,

Fig. 1 Music-mind dynamics—Neuroplasticity—Psychological flexibility—Entrainment—Embeingment—Human certainty principle

emotional and spiritual), and it highlights the culture-dependent and culture-transcendent aspects of culture. Undergirding this are six universal principles and processes that express how a health effect or healing transformation from one state to another occurs within a human being.

Levels of Culture

The outermost open circle consists of a dotted line with large openings indicates the affective and laden frame of culture. Here, culture can increase or decrease the efficacy of any intervention or practice. This relates to the group level of culture, as well as that of the individual. A few examples are worth mentioning here. Two books that show critical importance of the group cultural level are *The Culture of AIDS in Africa: Hope and Healing Through Music and the Arts* (Barz and Cohen 2011) and *Singing for Life: HIV/AIDS and Music in Uganda* (Barz 2005). Both works highlight the transformational role that grassroots music and arts play in education and changing beliefs and behaviours with respect to the disease.

These cases stand out as powerful medical interventions in the broad sense of the term as defined earlier. Indeed, when false notions about what the disease is, how it is contracted and spread and how it can be cured are predominant and deeply embedded in culture, with all its complexities and at times, rigidity; it is only by being part of the fabric of culture that positive change can occur. It is also the primary reason why attempts by outside medical agencies and health programmes largely failed to have an impact. It was at the level of the grassroots that trusted local musicians, performers and stakeholders could begin to co-create a new culture of health based on new understandings, beliefs and behaviours.

At the level of the individual, I am not referring to a person's culture per se, but rather to view a person *as* culture. That is, each person represents a unique landscape of meaning, beliefs, understandings and practices that can best be viewed not only through the lens of culture, but rather *as* a culture itself. Arthur Kleinman's (2006) case studies in *What Really Matters: Living a Moral Life amidst Uncertainty and Danger*

highlight the importance of having a nuanced understanding of an individual as culture to provide effective treatment. If such insight is absent, it not only can lead to misdiagnosis and mistreatment, but also can keep a patient in a state of illness and despair, which could have otherwise been healed. The *person as culture* provides a dynamic space of potential where patient and healer can make contact and discover a path of healing and health together. Along this path, music is often the most powerful medicine. This is certainly true in my own applied practice of providing music-based wellness and healing programmes to people that employ multiple modalities I have learnt and developed over the years. In a healing session, music that is specialised for the individual forms a kind of channel or vehicle of transformation that carries the person from the present state of pain, stress, confusion or illness, to a new desired state of wellness, peace, clarity or health.

While there are numerous ways to experimentally test specific physiological markers of healing, I have also been keenly interested in developing theoretical models and conceptual frameworks that will aid us in better understanding the transformational process of healing itself, which has led me to the above model. Based on components of the model, and related variables that are implied by it, for instance, flexibility engendering aspects of music and culture, we can go deeper into understanding the *how* of musical healing (see Koen 2013).

In addition to these levels of culture, the model also highlights what I call the culture-dependent and culture-transcendent levels of consideration. While this distinction might be obvious, it is important to emphasise it for the future development of medical ethnomusicology. Specifically, it is important to keep both levels in mind with respect to the research and application aspects of the field. As a field with roots in in-depth anthropological research and ethnography, discovering new knowledge that is often deeply embedded in culture takes time, dedication and endeavour. Such knowledge is overwhelmingly culture-dependent, requiring nuanced knowledge of the local language, medicine, worldviews, beliefs, music, instruments, literature, history and more. Yet, at the level of principle and process, there are almost always culture-transcendent universals that either relate to, inform, or can be applied to benefit people in other cultural contexts and situations. From this vantage point, the

researcher's vision is both deeply engaged in the local reality and also considers the possibility that within that specific locale and its culture-specific expressions, there can be knowledge about the human condition more broadly, perhaps even giving profound insight to the whole of humanity about music, health and healing. For today's sensitive researcher, this orientation is the polar opposite of ethnocentrism or of trying to force a local practice into another culture's lexicon of understanding to give it value or meaning. Rather, if there are such culture-transcendent or universal principles or processes that do emerge from in-depth ethnographic research, they are simply part of the research data and merit further investigation.

The culture-transcendent also functions in a disciplinary-transcendent way, providing a means of communicating across fields conventionally separated by a culture of language and jargon. The six universal principles and processes discussed below provide examples of virtually benign terminology that illustrate the notion that there is value in developing ways of discussing both the culture-dependent and culture-transcendent aspects of music, health, healing within and across cultures and disciplines of research and applied practice.

The Five Factors of Music, Health and Healing

How does music participate in health and well-being? How does music heal? Why does music move us in both subtle and powerfully transformative ways? A key to answering these and related questions about music's functional power lies in the fact that it shares the same five factors that comprise a human being, health and healing—namely, the physical, psychological, social, emotional and spiritual (or transcendent) dimensions of life. The three groups of five intersecting circles in the model illustrate that a human being, health and healing and music all share these same five factors. There are two important considerations with respect to the five factors: (1) each factor represents a unique aspect of the whole person that can give insight into the experience of illness or health, and a path towards healing and wellness; and (2) each factor is not an island unto itself—the factors are diverse expressions of one whole, one reality. Hence,

while music and sound have many specific approaches to treatment within each distinct factor (e.g., the emotional factor of music effecting change in the physical factor of a person), music is best viewed as a holistic treatment—functioning in a multifactorial way to effect change in all the factors, the whole person. Put another way, music is not just a whole body experience, it is an experience, potentially a transformational one, of a person's whole being.

Universal Principles and Processes

By investigating the *how* of music's role in health and healing, six core principles and processes have come to the fore in my research and practice. While one can say that all terms, as language, are embedded in culture and therefore carry culture-specific meaning that cannot be lumped onto another culture's practice or understanding, or used to replace local terms, there are also terms that are relatively if not completely benign with respect to research and exploring universals of the human condition and experience. Equally important is the worldview and intent of the researcher or practitioner.

Whereas the early stages of academic research, whether in the social or medical sciences, or music and the arts, was plagued with an ignorance of how ethnocentrism and cultural hegemony was often embedded in the terms and language used in discourse, we have moved into a new era that can allow for discourse at the levels of the local and highly culturally specific, as well as the culture-transcendent and universal. Hence, the six principles and processes I propose here are benign with respect to this point. That is, the terms used here do not imply that local terms are in need of changing, improvement or replacement. Rather, the terms provide a way of understanding the underlying dynamics of change that are potentially universal across cultures.

The explanatory power of the six principles and processes lies in part in their relation to the five factors of music, health and healing, and that they can function individually or collectively. As a holistic conceptual frame, it can provide a new paradigm for the future of medical ethnomusicology—a paradigm that includes a keen interest in universals and

applied practice. The six principles and processes are neuroplasticity, psychological flexibility, music-mind dynamics, entrainment, embeingment and the human certainty principle (HCP). Similar to the five-factor model, these principles and processes represent unique aspects of a broader overarching process of transformation through music.

Music-Mind Dynamics

This part of the model is developed from earlier versions used to explore the dynamic and affective relationship among music, specialised practices (e.g., meditation), health and healing (see Koen 2009, p. 65). For the purpose of the current model and to lay out a conceptual frame for the future of medical ethnomusicology, music-mind dynamics emphasises the inextricably interwoven and affective relationship between music and the mind. That is, in the context of research and practice, we must always consider the role of the mind in music, health and healing.

Here, mind also entails the brain inasmuch as without the brain, there is no mind. Music-mind dynamics is also intimately related to all the other aspects of the universal principles and processes of the model. For instance, by engaging in practices that build upon and develop one's capacity of psychological flexibility, the dynamic underlying quality of the brain's neural plasticity is activated and compelled towards that which the particular practices are directed. Music, as a primer and practice of psychological flexibility can facilitate health and healing, and by entering a state of psychological flexibility, can also have a transformative effect on the brain itself through its inherent capacity of neuroplasticity (see Koen 2013). Here I emphasise the role of music in directed thought and conscious activity, which strengthens a complex interactive dynamic between thought and experience. That is, the brain certainly influences what is often called the mind—senses of being, spiritual sensibilities, emotions and consciousness itself; but all these also influence the brain, its neural pathways, processes and cognitive functions and can lead to positive health outcomes (see Begley 2007; Doidge 2007; Hinton 2008; Meymandi and Mathew 1998).

Neuroplasticity: Neuroflexibility

Neuroplasticity is the brain's inherent capacity to change its structure and functional capacity through cognitive demands or repeated practice. When a repeated practice is directed towards a particular health outcome, the brain responds by generating neural pathways and networks that approach and over time can meet the intended outcome. Music, as a flexibility primer, not only facilitates the experience of psychological, cognitive, somatic and emotional flexibility (Hinton 2008), it also activates the neuroflexibility of the brain.

Music, as a vehicle of meaning and a practice that can activate the neuroflexible response of the brain can be a key part of a healing process that seeks to embody (or *embeing*) the *meaning* of health and healing. Such music directed at healing is seen in countless traditional and ritual practices that have been the subject of ethnomusicological and anthropological research since these fields began. However, the connection between music and neuroplasticity has yet to be rigorously engaged. As one of the foundational aspects of music-mind dynamics, as the defining quality of the brain's malleable nature, and as a central process that participates in health and healing, music and neuroplasticity is a new area of inquiry that is full of potential for the future of medical ethnomusicology.

Psychological Flexibility

Psychological flexibility is a broad category that entails cognitive and emotional flexibility (Hinton 2008, pp. 125–129). In addition, it is involved in all aspects of flexibility based on the five factors model. Thus, physical, social or relational and spiritual flexibility are also in a dynamic and affective relationship with psychological flexibility. Key research has established psychological flexibility as a fundamental aspect of health and wellness and refers to three broad areas: (1) psychological processes of change, (2) a psychological or holistic state of potentiality, and (3) the ability to adapt or traverse psychological and related domains (Hinton 2008; Kashdan 2010; Koen 2009; Rozanski and Kubzansky 2005).

With respect to psychological flexibility, Kashdan highlights four "dynamic processes that unfold over time [that] could be reflected by how a person: (1) adapts to fluctuating situational demands, (2) reconfigures mental resources, (3) shifts perspective, and (4) balances competing desires, needs, and life domains" (Kashdan 2010, p. 2). Building from Rozanski and Kubzansky (2005), who suggest psychological flexibility as a new paradigm in the research and practice of psychology, Hinton (1999, 2008) advocates for the same in medical anthropology and medical ethnomusicology. Likewise, other key research into music and psychological flexibility shows its explanatory power for understanding music's role in health and healing and its potential in applied practice of music and healing (Koen 2008, 2013; Jones 2010).

Hinton's (2008) concise definition is instructive, stating that psychological flexibility is "the ability to shift in order to adaptively adjust to a given context" (p. 125). He further articulates three steps, or the "triphasic structure of psychological flexibility" that entails shifting the emotional or analytic lens through which an event or situation is viewed (Hinton 2008, p. 124). The three steps of this "set shifting" are as follows: (1) Disengage, (2) Contemplation of Choice and (3) Selection. To this, I add step (4) Action, which carries the strictly psychological process of disengage-contemplate-select into the field of action and experience. Notably, Kashdan (2010) points out that psychological flexibility interventions are not only effective treatments "for people suffering from disorder, they can [also] be used to increase well-being at the personal and even societal level" (p. 19). From this vantage point, music as a quintessential primer of psychological flexibility not only can constitute effective interventions and treatments but also can increase well-being for individuals, groups and society.

For over a century, ethnomusicological and anthropological research has shown music to be both a healer (i.e., an effective intervention and treatment) and a health promoting practice. Since the beginning of recorded history, there are testimonies of music's healing and health building power. Yet, due to the complex nature of music, which has myriad variables in its sonic and cultural contexts, in hand with the complexities involved in human health and healing, developing effective

conceptual frames for research and application, especially beyond a specific cultural context has been understandably problematic (see Roseman 2008; West and Ironson 2008). We now have new ways of conceptualising music's role in health and healing and therefore have new possibilities to develop theories and test them in any number of ways as far as our imagination allows. Continuing to link the universal principles and process, we now build from music-mind dynamic in hand with the interactive and supportive roles of neuroplasticity and psychological flexibility to entrainment.

Entrainment

Entrainment has recently received more attention in ethnomusicological research, with one track being focused on cognition and the brain, and another on health and healing (e.g., see Berger and Turow 2011; Clayton et al. 2004; Koen 2009). It is puzzling why it has not been the focus of more research across fields interested in music's role in health and healing inasmuch as music and entrainment are intimately connected—we could say, for instance, that entrainment is a natural property of music. Herein lies a fascinating law of the natural world that shares what is arguably the most fundamental physical component of sound and music, namely rhythm; or put another way, vibration.

Briefly, entrainment is the process of two or more autonomous oscillations or rhythmic processes coming together into synchrony or unity. The physical process is one that is dependent on two factors: physical proximity and rhythmic power. In the classic example of Dutch physicist Christiaan Huygens, who discovered entrainment in 1665 by observing that pendulum clocks on different cycles of oscillation would synchronise over a period of time if they were in close enough physical proximity. Subsequently, entrainment has been documented in a host of contexts in the natural environment, and in mechanical, biological, psychological social and musical systems as well as in ritual and cultural contexts where multiple such systems are interrelated (see Berger and Turow 2011 for a comprehensive review).

Entrainment is both a powerful natural law that can be exploited for research in medical ethnomusicology, and it is a conceptual frame to

describe movement from one state of being to another, for instance, within the context of psychological flexibility specifically, and from illness to health more broadly. While measuring the process of entrainment can be relatively straightforward with respect to identifying two or more processes of a system that can entrain as a sign of a healing process, it is also a powerful explanatory principle to understand the more elusive aspects of healing entailed in Arthur Kleinman's concept of "sacred clinical reality" (Kleinman 1980, p. 241). He includes both the physical and belief aspects that play into illness and healing, which builds on the socially and culturally informed concept of "clinical reality"—or a complex of interrelated factors including "the beliefs, expectations, norms, behavior, and communicative transactions associated with sickness, health care seeking, practitioner-patient relationships, therapeutic activities, and evaluation of outcomes" (Kleinman 1980, p. 42).

Healing experiences, medical systems or clinical realities that include a consideration of that which is spiritual, religious or intangible "emphasize sacred reality, illness orientation (meaning that they take into account the patient's account of the problem as their central concern), symbolic intervention, interrogative structure, family centered locus of control … and substantial expectation of change, even cure" (Kleinman 1988, p. 120). From this perspective, each of these considerations can be seen as exerting an influence, an energy, an oscillation or a rhythmic process that participates in entrainment across biological, social, psychological, symbolic and cultural contexts or systems.

Embeingment

It is arguable that neologisms are rarely needed today; however, at times they can be helpful, even if simply to help redefine existing terms that have come to limit the discourse. One example from the history of biomedicine and its concept of how medical research and practice should be conducted is instructive. Biomedicine proceeded from the notion that a human being was comprised of various biological parts and material systems. In the late 1960s, led by the work of Herbert Benson, this expanded into the mind-body model of medicine. A decade later, George Engel

(1977) proposed the biopsychosocial model of medicine, which has become the most progressive model in mainstream biomedicine. Since then, a flood of research concerning the interrelated affective nature of mind, body, emotions, belief, behaviour, social support, economic and political issues as well as a host of diverse practices and areas of interest have moved issues of mind-body dynamics from the fringe into the mainstream of biomedicine. "According to the mind–body or biopsychosocial paradigm, which supercedes the older biomedical model, there is no real division between mind and body because of networks of communication that exist between the brain and neurological, endocrine and immune systems" (Oakley Ray cited in Brower 2006, p. 358).

In a similar way, embodiment has lost some of its explanatory power inasmuch as the body has taken precedence over other key aspects of a *human's being* and those of health and healing, which are outlined in the five factors model. When music and related practices exert an influence in the complex that is a person, such an influence is not only in the body, per se, but also in all five factors of one's *being*; hence, embeingment is more apropos in articulating the music effect in health and healing. From a holistic perspective that views the body as being inclusive of and inseparable from the five factors, the term embodiment can be just fine. However, embeingment can be useful as a more accurate holistic frame for research and practice.

Human Certainty Principle

Perhaps the most abstract or challenging of the concepts I have put forth is the Human Certainty Principle (HCP). Perhaps there is a better term that will arise from our discourse, however, let me explain my intent here. Across diverse cultures and clinical contexts of illness and healing, there is a dynamic I have noticed and experienced myself that I can best describe as a kind of deep sense of internal knowing or certainty. As a metaphor, the Heisenberg Uncertainty Principle (HUP) seems to me apropos as way to describe a quantum dynamic between precognition and manifestation that exists as a potentiality for healing transformations. This potentiality first emerges as an ineffable sense of knowing beyond intuition, yet is unclear as something that can be exactly defined. Nevertheless, this sense of certainty

(HCP) can function as an entraining force, engendering flexibility through music-mind dynamics and leading to or forming a precursor of healing.

The role that music can play here is by helping a person enter a state of potentiality where the HCP can express itself. From another perspective, the HCP can be seen as an experiential moment where a patient has a kind of mindshift or awakening to a real possibility of healing. Moreover, this experiential moment, which can also be extended and lasting over long periods of time until a goal is reached, seems to be part of a broader spectrum of human experience not limited to healing. That is, there are times or moments in life when we experience something beyond intuition, a distinct experience of knowing without any rational justification or evidence that we can identify. Perhaps there is a rational basis that we just have not discovered yet. Nevertheless, at this time in history, the HCP can provide a frame for exploration of this dynamic, which might lead to further discoveries of our human potential and that of music's role in such experiences.

Initiatives in Medical Ethnomusicology

The future of medical ethnomusicology, like any field, can be seen as dependent on its ability to contribute value to human beings in any number of contexts and to provide solutions to problems facing individuals and society. From this perspective, I invite the readership of this volume to offer areas of focus for medical ethnomusicology so that it can best meet these requirements. Here I offer a beginning of key areas and initiatives for medical ethnomusicology that can benefit humanity and participate more fully in conducting research and applying in practice and performance music that will carry us forward in the discourse of music, health and healing.

Some initiatives in Fig. 2 are obviously connected to music and related practices, while other are not. Nevertheless, I invite you to consider the multiple roles that music and culture play in all of the areas discussed below. Rather than propose a detailed agenda for each initiative and sub-topic, I will share one example of a programme I was leading at Florida State University before I decided to let it go and relocate to

1. Music and public health (e.g., rural public health, exercise and nutrition, mental and behavioural health, transforming obesity, transforming stress)
2. Traditional practices for health and healing
3. Musical healing in applied practice
4. Music performance for health and wellness
5. Music performance for healing
6. Sound, health and healing
7. Music and wellness in daily life
8. Music and women's health
9. Music and men's health
10. Music and older adult's health
11. Music and children's health
12. Music and the environment
13. Music and child education
14. Music and autism
15. Holistic, integrative, complementary and alternative medicine (HICAM)
16. Holistic wellness education and training
17. Music and the expressive arts (health and healing)
18. Biomedicine in cultural context
19. Music and sexual education
20. Music and HIV/AIDS
21. Music and the brain
22. Music and the body
23. Music and the mind
24. Music and emotions
25. Music and relationships
26. Music and the transcendent
27. Music and neuroplasticity
28. Music and psychological flexibility
29. Music and entrainment
30. Music and embeingment
31. Music and the Human Certainty Principle (HCP)

Fig. 2 Possible initiatives in medical ethnomusicology

Xiamen University in China. The programme was not squarely in music, ethnomusicology or the arts, and this story shows how medical ethnomusicology can participate in programmes not conventionally within our purview. If the medical ethnomusicologist, or anyone in music and the arts, allows their mind to encompass all of the possibilities in their institution or indeed the world, the possibilities are limitless and full of joy and excitement.

The programme was a federal grant call for proposals from the US Department of Agriculture (USDA) that was to fund three five-year blocks of innovative research to solve the problem of childhood obesity in the United States. Funding was at $5 million for each five-year block.

Colleagues from Department of Nutrition and the College of Human Sciences sought me out to lead this programme. A question that might come to mind is: Why choose a medical ethnomusicologist? For me, the answer can be found in part how the World Health Organization contextualises the problem of what they call "globesity" or the global epidemic of obesity. Specifically, if one does not take into account the psychological, social and cultural dimensions that contribute to obesity, interventions will not be successful. Indeed, the reason that such a major grant was offered by the USDA is that previous conventional approaches of diet and exercise failed miserably, since they did not account for the other factors. Moreover, virtually all approaches were disease oriented rather than health oriented. Notably, such an illness-orientation draws upon the psychological flexibility dynamic in the opposite direction, focusing on and leading one towards the object of focus, in this case, the problem or disease of obesity, rather than a focus on health, wellness and healthy weight.

When a clear shift was identified in the area of obesity research, specifically to include psychological, social and cultural factors in hand with a novel approach to tackle the problem anew, medical ethnomusicology came up as a perfect way to lead the programme. By positioning culture as the key contextual frame for research and intervention, proceeding from a health-focused orientation, and having music and the arts at the centre of recreating a culture of health for the individual and community, medical ethnomusicology stands out as bringing valuable resources to an urgent problem. The details of the programme we were pursuing are beyond the scope of this chapter. The point I would like to highlight here is that ethnomusicology is perfectly positioned to participate in, and indeed lead, a host of new initiatives that are now of critical concern across cultures.

Moving Forward

In addition to continuing the many tracks of research current in medical ethnomusicology, Fig. 2 presents some key areas for consideration of research, applied practice and performance (see also Koen, 2014). While some areas certainly stand alone as important areas of research without the

health and healing component (e.g., music and human rights, music and the environment, or music and child education), the purpose here is to also consider these and other areas as contexts wherein the possibility of facilitating illness or healing both exist, and as such form important areas of consideration. With this, and the subsequent contributions of others, we can more fully participate in and promote the experience of music and health for all.

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Weapons of Mass Happiness: Social Justice and Health Equity in the Context of the Arts

Clive Parkinson

Terms like "social justice" and "health equity" trip off the tongues of politicians and civil servants alike. Their speech peppered with aphorisms, those in the public eye frequently offer the sound-bite-weary public, juicy morsels of undeliverable aspirations designed to placate the hungry masses and keep them passive. Utopian ideals are peddled, crowds are satiated and the political bandwagon moves on. This chapter will explore the world of marketing and spin, asking if the arts have any relevance in this political minefield, and if so, are they immune to such hyperbole? I will argue that the arts offer us a potent weapon—double edged sword—a manifestation of free will and self-determination on one hand, but on the other, a utopian elixir offered up to solve all life ills, and as such, a social anaesthetic. From the manipulation of African American jazz musicians, to verbatim theatre born of street riots, this chapter will seek to explore the relevance of the arts and health movement as part of a subversive, self-created narrative born against a backdrop of relentless racial bigotry tied to struggle and oppression, to which economist and social

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theorist Jacques Attali (1985) attests: "listening to music is listening to all noise, realising that its appropriation and control is a reflection of power, is essentially political" (p. 6). This will be countered by an exploration of the state-sponsored instrumentalism of art and artists to fulfil explicit and covert political agendas in the name of culture and the "free world".

A Spoonful of Sugar from the Land of the Free

Communities are awash with choirs; elders who have found an alternative to the palliative of organised religion and who in their twilight years, find a cultural panacea to the trials of great age. These ensembles of octogenarians, potentially motivated by research that offers the potential of a sense of community or alleged improvements in respiratory function, in turn, provide researchers with a rich seam of gold in funding and politicians a cheaper alternative to cruel medication and cost-effective solutions to reimagining soulless care homes. Amid the rush to choir practice we need to ask: what are such programmes doing to actualise a broader experience of equity and human rights for older members of our communities?

The story of Henry, a man "who suffered from dementia for a decade and barely said a word to anyone—until Music & Memory℠ set up an iPod program at his nursing home" (Music & Memory 2017), is typical of the commercialisation of a simple idea—music is good for you. With over 2.6 million internet hits, this film is compelling. It is simple: a man, apparently in the depths of isolation, is animated by listening to music he enjoyed earlier in his life. Suggesting its work is both "miraculous"' and "rooted in extensive neuroscience research" (Music & Memory 2017), Music & Memory's offer is one that taps into deep rooted fears of our own individual mortality through the language of isolation and terror, and all at a cost. With a training package from $250 to $1000 and a DVD to market, its website appears more preoccupied with sales and co-option of its methods and less with the common goods.

As Music & Memory say, their approach is simple, "elegant and effective: We train care professionals how to set up personalized music playlists, delivered on iPods and other digital devices, for those in their care" (Music & Memory 2017).

While the film of Henry is undeniably engaging, there is an uneasy feeling that it is almost like a trick of light, a transient taste of what the person might have been—a moment of individual expression and enjoyment, yes—but by no means a miracle, its effect fleeting, offering the viewer perhaps, their first taste of "dementia porn".

Like MGM films with its famous opening sequence of a lion's roar, Music & Memory has registered its work through a "service mark" which, like a trademark, is common in US law, designed to stop infringement by competitors. It is easy to imagine care homes across the USA with rows of elderly residents plugged in and tuned out—anaesthetised and individually contained—or over stimulated by prescribed personalised packages. But if people are "awakened" through this experience, what would the ethical and resource implications be for those charged with meaningfully responding to sentient individuals, suddenly made aware of their plight? Most probably the iPlayer will simply become the pacifiers of the frail and elderly.

Would a younger Henry have consented to his iPlayer inspired "scat" being shared by the millions who have feasted on his remarkable moments of personal pleasure? For every Henry, countless numbers of older people are lonely and isolated and without the resources to access sophisticated and person-centred care and are more likely to end their days in "warehouses of the dying" (Gawande 2010). Has Henry simply been used as the MGM lion of Music & Memory, and do we really need training for something as simple as listening to music?

Before we can really consider the possibilities of what the arts can meaningfully offer us, let us explore the disparity, inequity and political spin that underpin what are described as the social determinants of health—and where better to start, than the land of opportunity and freedom, where inalienable rights are enshrined in the constitution. When Thomas Jefferson penned his first draft of the US Declaration of Independence in 1776, could he have anticipated the levels of selfish individualism that would follow?

We hold these truths to be sacred and undeniable; that all men are created equal and independent, that from that equal creation they derive rights inherent and inalienable, among which are the preservation of life, liberty and the pursuit of happiness (Jefferson cited in Boyd 1950, p. 6)

In recognition of Henry's African American heritage, perhaps it is fitting to plot inequalities in terms of health and the arts, from what has been described as the *Harlem Renaissance* of the 1920s, a movement which would go on to empower self-expression, identity and racial pride. Although at the time of the "renaissance", it had not yet been seen as a movement, but with the term being applied retrospectively, it spawned a body of artists that would exert a powerful influence on future generations.

Through the song *Strange Fruit* (released in 1939), musician and songwriter Billie Holliday transformed a 1937 poem by Abel Meeropol about the 1930 lynching of Thomas Shipp and Abram Smith in Indiana. This is arguably the first and greatest anti-racism song, in which Holliday viscerally and lyrically used her art form to address one of the most deeply rooted of all inequalities: racism.

Many artists who emerged from the renaissance could not compete against the seemingly mainstream white equivalents who were dominating the Western art world. African American scholars James Weldon Johnson and Houston A. Baker, Jr (1988) believed that the renaissance was a failure and was overlooked due to being "denied access to the avenues of white success" and that "blacks cannot be successful in the ways whites can and too often 'fail' when measured by those standard(s)" (Johnson & Baker cited in Howard 1988, p. 638). Johnson and Baker argued that black American modernists had to be entirely conscious and mindful of their cultural past to pursue equality, practice self-expression and advance as a people (Johnson & Baker cited in Howard 1988, p. 638).

When Music Stops Wars

In October 1960 when the American jazz musician Louis "Satchmo" Armstrong arrived in what was then the Belgian Congo, he was carried on a makeshift throne from his limousine that had swiftly taken him from Leopoldville's airport to a packed out national stadium, where for three hours alongside his *All Stars* band, Armstrong would perform to all sides of the warring factions in the bloody civil war which was tearing the

country apart. From the time he arrived at the airport to the moment he set foot back on his flight out of the country, the war was put on hold, all weapons were laid down. Music had stopped the war, albeit temporarily. Three hours after he left Leopoldville, the war began once more.

Armstrong was part of a US State Department-sponsored tour of African countries: an attempt at cultural diplomacy and positive image-building for the USA during a period of escalating Cold War tension. As early as 1956 Dizzy Gillespie had toured Greece, the Middle East, North Africa, India and the newly partitioned Pakistan; part of what was then referred to as the Northern Perimeter Defence Zone—an invisible line that had the potential to keep the Soviet Union away from oil and mineral rich land masses.

In the BBC (2016) documentary, *The Jazz Ambassadors of the Cold War,* the jazz pianist Julian Joseph, tells the story of "how some of the biggest jazz musicians toured the world in the name of democracy, only to turn the tables on the US government that had sent them".

Inequalities and racial divisions were endemic across the USA during this same period and in 1957, three years after the Supreme Court ruled unanimously that separate educational facilities are inherently unequal, nine African American students, now known as the Little Rock Nine, attempted to attend Central High School in Little Rock, Arkansas which until then, had been an all-white school. On the first day of the school term, "a white mob gathered in front of the school, and Governor Orval Faubus deployed the Arkansas National Guard to prevent the black students from entering" (Martin Luther King Jr. and The Global Freedom Struggle n.d., p. 1).

Following the intervention of Dr Martin Luther King, who wrote directly to President Eisenhower requesting a swift resolution, a federal district court injunction to prevent the governor from blocking the students' entry was won. Following escalating racial tensions, King told the president that if the federal government did not take a stand against the injustice it would "set the process of integration back 50 years. This is a great opportunity for you and the federal government to back up the longings and aspirations of millions of peoples of good will and make law and order a reality" (Martin Luther King Jr. and The Global Freedom Struggle n.d., p. 1).

Amid the public relations campaign being delivered by the Jazz Ambassadors, the Little Rock incident was becoming an international embarrassment, reflecting the true and unequal nature of American society, as Eisenhower ordered troops to guard the students, who were protected for the remainder of the school year. Whilst the racist Governor Faubus closed all of Little Rock's public high schools rather than proceed with desegregation the following year, in 1959 the Supreme Court ruled that all schools must reopen and resume the process of desegregation.

Joseph recounts that having been approached by the US State Department to play concerts in the Soviet Union, Louis Armstrong watched white children spitting in the faces of black children on TV and commented, "The way they're treating my people in the south, the government can go to hell"—he would not go to Russia—"How can I tell them about my country?" (BBC 2016).

The reality of contemporary life for high-profile African Americans artists was that they had been excluded from restaurants and public spaces their entire life, so how could they prop up a racist political status quo. By refusing to be part of this soft diplomacy, Armstrong risked his career, with concerts cancelled and gigs lost, until October 1960 when the government and Civil Rights Movement appeared to be making political changes with presidential support, and Armstrong made that visit to Africa.

As an armed political group, the Black Panther Party (BPP)—which emerged in 1966 to monitor police behaviour and brutality—could easily be ignored in a chapter focused on the arts and inequalities, but a brief mention of their role and distorted public perceptions of their concerns, may help contextualise this train of thinking further. Described by the Federal Bureau of Investigation Director J. Edgar Hoover as "the greatest threat to the internal security of the country", the BPP was placed under an extensive programme of "surveillance, infiltration, perjury, police harassment, and many other tactics designed to undermine Panther leadership, incriminate party members, discredit and criminalise the Party" (Newton 2002).

Whilst the history of the BPP has been polarised as either criminal or heroic, many commentators have ignored the more practical social programmes that were a core activity of party members, from free breakfast

for children programmes to community health clinics. Its Ten-Point programme (Wikipedia 2017) called for what we would understand as basic human rights; freedom, employment, housing, education equality and social justice.

Simultaneously, the inherently political Black Arts Movement was the only American literary movement to have at its very heart, a socially engaged aesthetic. It has been argued by Ishmael Reed and others that there would be no multiculturalism movement without Black Arts. (Modern American Poetry n.d.).

Perhaps the US State Department was guilty of exploiting black artists in the name of marketing "brand America" in its Cold War land grab. The Congo's rich supplies of uranium would go on to be used in the creation of US nuclear bombs, and today the warring militias are more likely to be protecting the industrial interests of global tech giants as they mine for essential mineral components of our digital consumer obsessions.

From its history of importing slaves to promises of a rosy future exporting its sugar coated vision of an equal America, we have seen a distorted version of reality. As the citizens of the USA became more inward looking and confident of the place on the world stage, an increase of everyday anxieties was becoming prevalent. The pursuit of happiness as a constitutional dream appeared fractured and people began to question their individual lot: am I not happy enough, because I am sick?

The emergence of cosmetic surgery offering people the appearance of radiant health was mirrored by the rise in new medications designed to iron out anxiety and depression, and in 1952, the American Psychiatric Association published the first *Diagnostic and Statistical Manual of Mental Disorders*. This would go on to become the most influential tool for mainstream psychiatry in the diagnosis and treatment of mental illness. I have argued elsewhere (Parkinson 2015) that the pharmaceutical industry largely controls our psychic terrain and that everyday anxieties and pessimism are largely perceived as unacceptable and symptomatic of illness, needing to be treated by the medical weapons of choice: pharmaceuticals.

In a final insult, this same period saw the largest epidemiological study of mental illness ever conducted in the USA. An analysis of the National Institute of Mental Health's Epidemiological Catchment Area

Study (Wilson and Williams 2004) evidenced striking racial differences in anxiety disorders, yet the pharmaceutical giant, Merck Sharp & Dohme was able to capitalise on the booming depression industry, by targeting its anti-depressant Elavil to doctors through a free album called *Symposium in Blues* in 1966, which consisted of predominately African American musicians' work. That an album of jazz and blues was being used to sell as an anti-depressant was an ironic and cynical piece of marketing, considering that African Americans accounted for startlingly high numbers of patients incarcerated in mental health units and prisons across the USA.

While on the Other Side of the Pond

As civil discontent in the USA raged on, in post-war Britain, it seemed that things were developing at a far more sedate pace. Aneurin Bevan's socialist dream of a free *National Health Service* where no one would live in fear was threatened from its very start by the self-interest of those who governed the hospitals and general practices across the country. As Bevan (1959) struggled to nationalise health services, he described the only way he could break the deal with those in power was to "stuff their mouths with gold". It appeared that the vested interests of the elite and those governing the country were being undermined by a proposed system of social care and health equity.

The Trinidad-born journalist and activist Claudia Jones (1915–1964) had been deported to Britain from the USA as a result of her political activity. As the founder of Britain's first major black newspaper, *The West Indian Gazette* in 1958, she became a driving force behind a proactive movement to embrace cultural change through the arts and, in January 1959, facilitated the first Mardi-Gras carnival in St Pancras Town Hall, which was directed by Edric Connor and featured black artists of renown, and televised by the BBC. These early celebrations gave birth to the slogan: "A people's art is the genesis of their freedom" (Jones 1959).

These were the roots of what went on to become the Notting Hill Carnival which now attracts crowds of over a million people each year. Guyana's ambassador to China, the writer and academic, Professor David

Dabydeen suggests that historically, "carnival allowed people to dramatise their grievances against the authorities on the street … Notting Hill Carnival single-handedly revived this tradition" (Dabydeen 2010).

This is a powerful idea, and an idea born of the streets themselves, not one devised by government mandate, in fact, one that at its heart challenges the very notion of authority. Those passionate individuals and groups that have made the Notting Hill Carnival possible over the last 40 years have routinely been demonised and vilified by the media, which would come to a political head in the 1968 *Rivers of Blood* speech by the then Conservative Shadow Defence Secretary, Enoch Powell, criticising commonwealth immigration and anti-discrimination legislation (Powell 1968).

The speech was described as, "the first time that a serious British politician has appealed to racial hatred in this direct way in our postwar history" (Manzoor 2008). This represented an explosive fuel to a country where discontent was on the rise. Powell warned of what he foresaw as the escalation of immigration and the inevitable violent consequences.

The tragic and intractable phenomenon which we watch with horror on the other side of the Atlantic but which is interwoven with the history and existence of the USA itself is coming upon us here by our own volition and our own neglect. Indeed, it has all but come. In numerical terms, it will be of American proportions long before the end of the century (Powell 1968).

In his last speech to the House of Commons architect of the Welfare State on 3 November 1959, Anuerin Bevan described the difficulties of persuading the electorate to support a policy which would make them less well-off in the short term, but more prosperous in the long term. Here, perhaps was the fundamental flaw in the dream of democracy and the utopian socialist ideal of equality for all: selfish individualism.

A Social Poison

> Choose Life. Choose a job. Choose a career. Choose a family. Choose a fucking big television, choose washing machines, cars, compact disc players and electrical tin openers. Choose good health, low cholesterol and dental insurance. Choose fixed interest mortgage repayments. Choose a

> starter home. Choose your friends. Choose leisurewear and matching luggage. Choose a three-piece suite on hire purchase in a range of fucking fabrics. Choose DIY and wondering who the fuck you are on a Sunday morning. Choose sitting on that couch watching mind-numbing, spirit-crushing game shows, stuffing fucking junk food into your mouth. Choose rotting away at the end of it all, pishing your last in a miserable home, nothing more than an embarrassment to the selfish, fucked up brats you spawned to replace yourself. Choose your future. Choose life. (Hodge 1996, pp. 1–4)

John Hodge's monologue on selfish individualism for the film *Trainspotting* offers a heroin-flavoured indictment of contemporary life and a spring-board from which I will draw the threads of this chapter to a conclusion.

Echoing Powell's premonition, riots swept across the UK in the 1980s and in the summer of 2011. In their analysis of the 2011 events, Richard Wilkinson and Kate Pickett (Wilkinson and Pickett 2012) describe the inequalities that lay behind the riots as a social poison. Unpacking the findings of the government inquiry into the riots in a Guardian opinion piece, the authors usefully remind us that, yet again, the contributory factors are well known: "lack of community, family difficulties, low social mobility, poor relations between police and young people, consumerism" (Wilkinson and Pickett 2012), but suggest that we need to understand the causes of these factors, commenting that, "as tobacco is a physiological poison, Britain's high levels of inequality are a social poison that increases the risks of a wide range of social ills" (Wilkinson and Pickett 2012).

The authors argue that this social poison works by emphasising the disparity between the richest and poorest in society, where money and status become the measure of personal worth. They comment that "among the FTSE 100 companies, many CEOs are paid 300 times as much as their most junior employees. There can be no more powerful way of telling huge swaths of the population that they are almost worthless than to pay them one-third of 1% of their CEOs' salaries" (Wilkinson and Pickett 2012).

Their argument is simple—if by our very nature, humans are "sensitive to being thought less of, disrespected, put down … … [then inevitably] … loss

of face and humiliation are the most common triggers to violence, … anti-social societies cause antisocial behaviour" (Wilkinson and Pickett 2012).

They urge us to be sensitive to inequalities and status which are rooted "in issues of dominance and subordination dating back to pre-human social ranking systems. They shape behaviour because we need different social strategies depending on where we come in the hierarchy, and how hierarchical our society is" (Wilkinson and Pickett 2012).

A disturbing hierarchical picture emerges when we take into account, the political elites' response to the riots that took place on the Broadwater Farm Estate in London in 1985. When he worked for Margret Thatcher's Policy Unit, old Etonian Oliver Letwin, co-authored a confidential five-page memo, suggesting that "the riots were caused by bad behaviour not social conditions" (Travis 2015) and arguing against investment in the community, which he proposed would do little more than "subsidise Rastafarian arts and crafts workshops" where black "entrepreneurs will set up in the disco and drug trade" (Travis 2015).

Until July 2016, Letwin was Minister for Government Policy in the Cabinet Office presided over by former Prime Minister David Cameron, and what has been described as a "cabinet of millionaires" (Beattie 2012) of which, in 2012, 18 of the 29 were millionaires, with a combined wealth of over £70 million. In August 2016, Letwin was knighted for recognition of his work in cabinet. It seems inevitable then that when the poorest and most marginalised people see the richest smugly laughing in their faces, it seems inevitable that they will "choose a big fucking television set, compact disc player, or electrical tin can opener" (Hodge 1996, p. 1).

Before any official inquiry took place into the 2011 riots in the UK, writer Gillian Slovo was commissioned by the director of the Tricycle Theatre, Nicolas Kent, to create a piece of verbatim theatre about the events, and their possible causes. Using interviews from politicians, police, rioters and victims involved in the riots, Slovo suggests there was a glimmer of an understanding, arising from what it might have been like to take part: how rage plays a part in mob violence, that it can also be about adrenaline, and even fun. "It's as if the constraints of life are just … thrown away, and there is relief in acting" (Addley 2010).

Slovo spoke to police officers who told her what massed displays of "hatred for the uniform" (Addley 2010) felt like, while you were wearing

one; to the politician Michael Gove, who asked why young people needed the state to pay for services when they could always join the scouts! Theatre critic Michael Billington describes how, "once again, the theatre steals a march on officialdom … and, if the result can hardly be expected to provide any definitive answers, it asks the right questions in a way that is clear, gripping and necessary" (Billington 2011). The Riots offered plurality of views around "a widespread sense of people, and not just the young, seeking revenge on an unjust society, offering information and provoking debate" (Billington 2011).

If the play was an exploration of why the summer riots happened, and what are the lessons we can learn, Billington suggests as a piece of art, it passes a vital test, "it offers us the evidence, and leaves us to form our own opinion as to why there is such anger on Britain's streets" (Billington 2011).

Perhaps it is with these reflections of a theatre critic that the strands of this chapter begin to coalesce. We have seen how Cold War tactics hijacked the credibility of black musicians, who at the same time were subject to racial abuse and segregation in their own countries, and we have explored the artistic outcomes born of inequalities and injustice through music and carnival, alongside the birth of cynical marketing in the pharmaceutical industry. In the case of the 2011 riots, it was contemporary theatre that preceded any official inquiry.

Incendiary Words

As early as 1819, poems had pulled a heavy political punch. When Percy Shelly responded to the atrocities of the Peterloo Massacre that year, it is hard to imagine that he could have envisaged a single verse from his poem would reach out far into the future, but his non-violent call to action continues to resonate through recent history.

> Rise like lions after slumber
> In unfathomable number
> Shake your chains to earth like dew
> That in sleep have fallen on you
> Ye are many, they are few.
> (Shelly 1819)

The poem's final verse has captured the imaginations of many oppressed groups from striking woman who demonstrated against working conditions in the garment industry of New York in 1909, to Tiananmen Square in 1989, the UK Poll Tax riots in 1990 and Tahrir Square in 2011, where demonstrators adapted the very last line of the poem to, "We Are Many" in explicit reference to working-class solidarity. On many placards of the Stop the War Coalition, the slogan was borne aloft, opposing what was widely regarded as an illegal war based on spurious evidence of the existence of weapons of mass destruction. Weapons which did not exist.

In his exploration of politically related poems, Professor Mark Wallace (n.d.) describes six categories of poems that might translate across other art forms. Wallace refers to calls to action, social/historical investigation, ideological exploration, visioning social transformation, politics of form or literary creation and finally, the personal as political (Wallace n.d.). When the home of Chilean poet Pablo Neruda was raided by the armed forces of General Pinochet in 1973, Neruda adroitly welcomed them in and remarked: "Look around—there's only one thing of danger for you here—poetry" (Feinstein 2008, p. 39).

An obscure play by the playwright Howard Brenton called *Weapons of Happiness* in 1976 tells the story of a strike by the workers of a crisp factory—a strike doomed to failure because the workers lack any coherent plan, the unions, police and management all being in each other's pockets. Michael Billington (2008) recently described the play as being a "blend of post-1968 disillusion and residual utopianism" and significantly that "Brenton's point is that radical change can only be achieved through organisation" (Billington 2008). In the same year, the desire to address racism in the UK through organised action was exemplified by the birth of the R*ock Against Racism* campaign.

In the USA, #BlackLivesMatter "has emerged to (re)build the Black liberation movement, following the 2012 murder of seventeen year old Trayvon Martin and subsequent acquittal of George Zimmerman for this crime" (Cullors et al. 2016). Founded by Cullors et al. (2016) as an ideological and political intervention, Black Lives Matter affirms the lives of people who have been marginalised within Black liberation movements placing, "Black queer and trans folks, disabled folks, black-undocumented

folks, folks with records, women and all Black lives along the gender spectrum", at the heart of its movement which is inhabited by cultural workers, artists and designers (Cullors et al. 2016). Following police brutality and murder in the USA, perhaps Black Lives Matter represents a cohesive force for social and cultural change: the organisation and radical change that Brenton calls for.

Neruda and Shelly, Cullors, Tometi and Garza are all calling for the same thing: equality and social justice. That artists address the inequalities that underpin social unrest, attests to the place of the arts in the investigation, ideological exploration and the re-visioning of society. More than that, participation in the arts offers the opportunities for the personal to become political, the individual become the communal—offering multifaceted calls to action. As Billington (2011) emphasises, the arts can offer us evidence, provoking us to form opinions—and just maybe, affect societal change.

The way in which health and well-being are now understood increasingly focuses on competition and not compassion, and into this largely clinical context, the arts and health agenda emerged as a force to humanise healing environments and advance its relationship with medicine, understanding its place in an agenda less focused on civic good and the social determinants of health, but of pathology and disease—as a means to achieving *individual health*. Whilst *arts and social justice* might not be as readily understood as *arts and health*, perhaps if we are to understand our public health agenda in terms of equity and justice, then we might truly engage with the social determinants of health and not simply decorate the edges of our individual lives.

CODA

In a nursing home in 2011, a short film of a man named Henry, enjoying his iPod playlist became a YouTube sensation. Although voyeuristic, it was never intended to offend and was created with good intention. However, watching this man singing along, it is incumbent on us to remember the inequalities that are still endemic across contemporary society in the USA and further afield, and the histories and destinies of

people marginalised because of race, religion, gender, ability or sexuality.

Of all the evangelical responses to this Music & Memory YouTube video, the response of ASFALT 21 (2015) has been "liked" by 245 people—more than any other comment. What was the comment? "In the future someone with alzheimers will listen to nicki minaj-anaconda, get up the wheelchair and start twerking in the nursery lol" (ASFALT 21 2015).

A glib response to the human condition perhaps, or the democratisation of music and health? When architect of the National Health Service (NHS) Anuran Bevan wrote *In Place of Fear* in 1952, he predicted thus: "Soon, if we are not prudent, millions of people will be watching each other starve to death through expensive television sets" (p. 192).

Perhaps this premonition has borne much darker truths. Not only do we watch migration, forced displacement, starvation and death—but we observe the grim reality of inequality and its consequences played out on our own flat screen TVs. When televised prisoners or homeless people sing opera, we feel like the world is somehow improved—prime time viewing for the well-fed masses—but is not this a lazy saccharine-coated exoticisation of others? Does it take a reality TV show to reform those on the streets into the show-ponies of the self-satisfied masses, so we can say we have turned lives around—sanitised the unclean—evangelists peddling some utopian dream.

The arts challenge, provoke and arouse us. *Or they should*. The arts and health movement seems to be thriving, yet black and ethnic minority artists and cultural leaders are thin on the ground, like black Oscar nominees in Hollywood, working-class actors in the UK and leading roles for disabled actors. The white educated middle classes appear to dominate the arts and health field. Might the arts and health movement become a toothless agenda, inward looking and self-satisfied? Without diversity, the arts and health movement risks are becoming self-congratulatory and worse—a potentially gated community.

In his report, *Against Value in the Arts*, Dr Samuel Ladkin (2014) suggests, "It is often the staunchest defenders of art who do it the most harm, by suppressing or mollifying its dissenting voice, by neutralizing its painful truths, and by instrumentalising its potentiality, so that rather than

expanding the autonomy of thought and feeling of the artist and the audience, it makes art self-satisfied."

Howard Brenton (1992) suggests alternative culture has failed, and that it has become "hermetically sealed, and surrounded … [where a] … ghetto-like mentality develops. It is surrounded, and, in the end, strangled to death" (Brenton cited in Kershaw 1991, p. 15). Perhaps we have already gone beyond instrumentalising our work, and like the incrementally commercialised health sector, we are weaponising the arts to target all life ills, and it is our arts and health movement, in and of itself, that could undermine its own intrinsic cultural value.

Like those elusive weapons of mass destruction that were figments in the minds of our leaders, deluded and hell-bent on war, happiness is a fickle and elusive state of being—not some by-product of consumerism, and perhaps, as Sederstrom and Spicer (2015) comment, "our superficial quest for happiness is destroying our relationship with what is real" (p. 69).

There is a paradigm shift taking place in the way health and well-being are understood—and I would argue that the arts have a powerful part to play in this cultural change, but our challenge is to remain authentic to our practice, whilst addressing the fact, that the most marginalised people in society may be completely disconnected from the arts.

In the USA, the incarceration rates of men from black and minority ethnic backgrounds are still disproportionately high. According to Sophia Kerby (2012) writing for the Centre for American Progress, "1 in every 15 African American men and 1 in every 36 Hispanic men are incarcerated in comparison to 1 in every 106 white men." More alarmingly still, "one in three black men can expect to go to prison in their lifetime" (Kerby 2012).

"Ignorance, allied with power", James Baldwin (1972) said, "is the most ferocious enemy justice can have" (p. 48), and as the UK embarks on a divorce from its place in the European Union and the USA begins a new wave of selfish individualism led by Donald Trump, should we passively brace ourselves for a little horror, or should the arts proactively disrupt inequality of race, gender, disability and sexual identity?

We will never address the health and well-being of communities until we get to grips with the injustices and inequalities that poison our

communities—the arts, however, might represent a most potent social determinant of long-term public health and well-being. Yes—art gives us small moments of joy, but art and artists also give us voice to question systems of control and perhaps, the means to question the status quo. In an interview with Studs Terkel, Baldwin (1989) also said that "artists are here to disturb the peace" (p. 21).

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Afterword

It is rare to end a book looking forward with eager anticipation to the next volume. Such is the case, however, with this collection of essays, which are stimulating, thought provoking and arresting. However, together with the accounts of diverse and widespread (even global) arts activity, notes of caution are to be found; creative artists in the arts and health sector should neither be satisfied nor complacent, nor lose sight of the need to shock, hold to account, challenge stereotype and rock the boat. So too with those readers who are opinion formers and policy makers, who are encouraged to (no should!) digest, take head, research further and implement change that is so (cost) effectively illustrated within these pages. As I have observed over many years of championing the health benefits of singing, music and the arts may not be a panacea for the ills of the world, but as these authors have demonstrated, the world can be a more socially just and equitable place through such engagement.

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