

Towards dynamic and interdisciplinary frameworks for school-based mental health promotion

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Abstract

Purpose – The purpose of this paper is to scrutinise two ostensibly disparate approaches to school-based mental health promotion and offer a conceptual foundation for considering possible synergies between them.

Design/methodology/approach – The paper examines current conceptualisations of child and youth mental health and explores how these inform school-based prevention and intervention approaches. The dominance of discrete, “expert-driven” psychosocial programmes as well as the potential of critical pedagogy is explored using frameworks provided by contemporary dynamic systems theories. These theories call for a situated and holistic understanding of children’s development; and they look beyond static characteristics within individuals, to view well-being in relation to the dynamic social and historical contexts in which children develop.

Findings – Psychosocial interventions and critical pedagogies have strengths but also a number of limitations. Traditional psychosocial interventions teach important skill sets, but they take little account of children’s dynamic socio-cultural contexts, nor acknowledge the broader inequalities that are frequently a root cause of children’s distress. Critical pedagogies, in turn, are committed to social justice goals, but these goals can be elusive or seem unworkable in practice. By bringing these seemingly disparate approaches into conversation, it may be possible to harness their respective strengths, in ways that are faithful to the complex, emergent nature of children’s development, as well as committed to correcting inequalities.

Originality/value – The current paper is unique in bringing together contemporary psychological theory with critical pedagogy perspectives to explore the future of school-based mental health promotion.

Keywords Empowerment, Education, Multi-disciplinary, Dynamic, Children, School mental health

Paper type Conceptual paper

Introduction

Within the field of child and youth mental health, it is acknowledged that psychological well-being is related to the relationships, socio-cultural practices, ideologies and institutions that children experience in their daily lives (e.g. Merikangas *et al.*, 2009). Despite this, most current conceptualisations of mental health, as well as approaches to prevention and treatment, continue to take an individualistic approach (Orford, 2008). Such conceptualisations emerge from psychological and health literature, grounded in a positivist paradigm, which assumes that there is an objective reality that can be observed, measured and understood outside of its social context. In contrast, critical educational theorists (Freire, 1970; hooks, 1994) place a critique of the structures and processes that maintain inequality at the centre of their analysis. From this perspective, any attempt to improve well-being necessarily involves critical awareness of oppressive conditions, as well as individual and collective actions to change those conditions. These educational theories are rooted in interpretivist and postmodern paradigms, which view phenomena as socially constructed and which challenge the idea of fixed realities and objective truths.

The seemingly incompatible nature of these approaches and their respective paradigms presents considerable challenges for research and practice in the area of school-based mental health promotion, most particularly because this is an area that straddles the



disciplinary fields of education, psychology and health. In recent years, there have been increasing calls for a closer alignment between mental health services and education (Fazel *et al.*, 2014). There is, therefore, a pressing need to scrutinise current approaches in schools and to develop conceptual models that resonate with researchers and practitioners across the disciplinary boundaries.

Of course, it is not necessarily the case that all research traditions in psychology, health and education are aligned to these paradigms in strict “either/or” terms. For instance, most school-based interventions that are underpinned by positivist or neo-positivist traditions acknowledge the importance of children’s social context and recognise how issues such as poverty and inequality influence well-being. Nevertheless, these interventions are the products of the theoretical and philosophical assumptions that underpin them. Thus, it is one thing to acknowledge that individuals are influenced by their social context, it is quite another to recognise that people are constituted by, and are inseparable from, the relationships and interactions that unfold within their social, cultural and political worlds, as is recognised by interpretivists. Fundamentally then, the issues are created at the level of paradigm and must be explored there. This paper seeks to unpack core assumptions underpinning these two contrasting paradigms and to explore the tensions and controversies that emerge from them. In so doing, it argues for a shift away from simple, reductionist models of human functioning towards innovative and dynamic prevention and intervention approaches. It also emphasises the distinct contribution of education theory and practice, as well as the need for approaches that ensure the genuine participation of children and young people, and links to broader educational goals of inclusion, democracy and participation. Although primarily a conceptual paper, some suggestions on practical ways forward are presented towards the end of this paper.

Conceptualising child and youth mental health

Positive mental health and well-being is crucial to enable children and young people to lead fulfilling lives, personally and socially as well as academically. While most children report generally good levels of both physical and psychological health, it is widely acknowledged that mental health problems are common and are becoming an increasing concern. For example, Fazel *et al.* (2014) suggest prevalence rates of 8 to 18 per cent, with many more children experiencing varying degrees of psychological distress. The most common problems include anxiety and mood disorders, attention deficit and hyperactivity disorders, behaviour disorders and substance-use problems (Green *et al.*, 2005; Harden *et al.*, 2001).

Traditionally, the causes of both physical and mental ill health were reduced to biological factors (biomedical model). However, over the past few decades a biopsychosocial model has become influential (Engel, 1977). This model represents a way of understanding how suffering and illness are affected by multiple levels of organisation, from biological (e.g. genetics, neurophysiology) to psychological (e.g. mood, thoughts, personality, behaviour) and societal (e.g. cultural, familial, socioeconomic) (Borrell-Carrió *et al.*, 2004). This model has been useful in drawing attention to the complex and multifaceted determinants of mental health difficulties and in galvanising a commitment to non-reductionist and integrative clinical practice (Benning, 2015).

However, the biopsychosocial model offers no safeguards against slipping back to reductionist biomedical thinking. Indeed, Cornish (2004) argues that the model has failed to challenge the dominance of the traditional biomedical approach and has not proposed theoretical relationships between biological, psychological and social levels. In the absence of satisfactory theorised relationships, understandings of children’s mental health and approaches to intervention tend to be individualistic and de-contextualised (Orford, 2008). Hence, despite the broad appeal of the biopsychosocial model, when identifying and diagnosing mental health difficulties, emphasis is firmly placed on individual attributes, which are interpreted as pathological regardless of whether they arise from

neurophysiological changes, intra-psychological stressors, troubled relationships or problematic structural inequalities such as poverty (Deweese and Lax, 2008). Likewise, when it comes to intervention there is a tendency towards individualised, short-term, discrete approaches that focus on symptom change rather than reworking problematic relationship patterns or confronting structural inequalities (Greenspan, 2008). This approach is problematic because it assumes that the cause of children's distress resides within children themselves and it places the burden for change on the individual child rather than broader social structures and relational networks.

One promising way forward is to place a central focus on relationships – those between individuals and between groups in a given ecological setting – rather than focusing solely on individuals. Dynamic systems approaches offer an interdisciplinary set of principles that emphasise relationships rather than individual elements, change processes rather than stable states, and emergent possibilities rather than one-way, cause and effect determinism (Overton, 2007; Overton and Learner, 2014). The core idea is that the characteristics and behaviour of entities (whether they be cells, human beings or social systems) depend on the nature of relationships between components rather than the properties of the components themselves (i.e. the whole is more than the sum of its parts). This central tenet gives rise to a number of other ideas (including emergence, non-linearity, hierarchies and boundaries) that together can be used to facilitate an understanding of children's mental health that is embedded in the social relationships that exist in families, schools and communities, and influenced by the broader socio-historical and cultural context (Fogel and Kawai, 2008). From this perspective, stable patterns of behaviour are understood to emerge from, and be maintained or transformed by, the mutual relationships between constituents. Such an approach is more faithful to the complex and holistic development of individuals within their ecological contexts (Overton and Learner, 2014).

While dynamic systems approaches facilitate a more holistic understanding of children's development and socio-emotional well-being, they can also be used to understand the functioning of complex organisations, such as schools. Dynamic systems perspectives both inform and cohere with a settings-based approach, which are currently garnering support in health promotion literature (Whitelaw *et al.*, 2001; Dooris, 2009). Such approaches are of considerable relevance to health-promoting schools, which have their foundation in the Ottawa Charter for Health Promotion (WHO, 1986), and which emphasise the environment's impact on health, thereby shifting from a sole focus on individual behaviours to the creation of supportive, whole-school environments (WHO, 1998; Simovska and Mannix-McNamara, 2015). A settings-based approach can support these goals since it represents a move away from a reductionist focus on single issues, risk factors and linear causality towards a holistic vision of health and well-being determined by a complex interaction of environmental, organisational and personal factors within the contexts and places in which people live their lives (Dooris, 2009).

On balance, however, a dynamic systems lens may not go quite far enough. Although it represents a fruitful interdisciplinary approach and has garnered support within education and other disciplines (e.g. Cofer, 2008; Evans, 2008), it does not offer a distinctly educational or pedagogical focus. Any meaningful attempt to discuss mental health in schools must draw on theoretical frameworks that speak to both fields (i.e. mental health and education). Furthermore, while Lerner *et al.* (2003) and Lerner and Overton (2008) assert that systems theories may be used to correct social injustice, these approaches have not been deployed in any wholesale way to challenge the structures and ideologies that are often a root cause of children's mental ill health. Therefore, in considering school-based mental health, there is a need for theoretical frameworks that challenge social inequalities[1] as well as advance the role and distinctive contribution of education. This paper, therefore, draws on both dynamic systems perspectives and critical educational theories (e.g. Freire, 1970) to explore how

schools can best respond to child and youth mental health difficulties. In so doing, this paper brings together two diverse bodies of literature. The aim is not to pitch one approach against the other, nor to collapse or attempt to reconcile the differences between them. Rather, the approach is to explore the challenges, confluences and possibilities that emerge from this juxtaposition, and whether it may support deeper understandings and more innovative responses to childhood mental health difficulties.

Schools – merely convenient sites for prevention and intervention?

Schools are widely acknowledged to be crucial settings for mental health promotion (WHO, 2001). Given the global drive towards compulsory education, schools are settings in which nearly all children and young people congregate for a large portion of their day and they therefore provide ready access to almost entire populations. Indeed, the “reach” of schools is increasingly recognised, especially given that only a minority of children with mental health problems access mental health services (Ford *et al.*, 2008; Merikangas *et al.*, 2009). School-based mental health interventions (e.g. mindfulness, social and emotional skill programmes, interventions based on the principles of cognitive behavioural therapy (CBT)) may be targeted specifically at children and young people who are considered to benefit most, such as those who have encountered significant adversity or risk. However, they may also be delivered as part of a universal preventative approach which offers the potential to enhance the lives of all children and not just those experiencing difficulties (Huppert, 2009). Universal and preventative approaches are appealing in terms of reducing stigma associated with accessing specialist services and on being cost-effectiveness (Kuyken *et al.*, 2013). Indeed, economic arguments are gaining considerable attention given the substantial public sector costs associated with child and youth mental health difficulties, and particularly given that the bulk of these costs are borne by frontline education and special education services (Snell *et al.*, 2013).

Given these arguments, it is unsurprising that there are strong calls for a closer alignment between health and education systems. Fazel *et al.* (2014) argue that mental health services routinely embedded within school systems can create a continuum of integrative care that improves both mental health and educational attainment for all children. However, it is noteworthy that within these arguments, the school is considered merely a convenient site for mental health prevention and intervention. Beyond a narrow focus on raising educational attainment (i.e. academic test results), there is no consideration of the role of education *per se*, hence, the transformative and enabling possibilities that education offers have been overlooked.

This contrasts with a health-promoting school framework, which tends to favour an educational approach that is interested in developing not only knowledge and understanding, but also real-life competencies that support young people in becoming active citizens who can make a difference through their actions (Simovska, 2012a). Nevertheless, even within health-promoting schools, mental health (as opposed to physical health) has received insufficient attention (Clarke and Barry, 2015). Educators seeking responsive solutions to children’s mental health difficulties have found a range of psychosocial intervention programmes, some of which are accompanied by helpful manuals and well-designed activities (see Table I for examples), but they have less guidance with regard to supporting children’s mental health through their ongoing educational or pedagogical practice.

Promoting well-being and positive mental health in schools: psychosocial interventions or critical pedagogy?

The following section considers the strengths and weakness of psychosocial interventions, which are currently dominating school-based mental health promotion, and critical

Table I.
Brief illustrative
examples of two
school-based
psychosocial
interventions

Mindfulness	FRIENDS for Life
<p><i>Background</i> Mindfulness is a contemplative practice derived from Eastern Buddhist traditions, which involves the cultivation of awareness and non-judgmental acceptance of one's moment-to-moment experience (Kabat-Zinn, 1990). When mindfulness is practiced regularly, thoughts and emotions come to be observed and noted as mental events that arise and pass away, rather than as aspects of the self or as important truths that must dictate behaviour (Baer, 2003)</p> <p><i>Activities, skills and competencies</i> Mindfulness activities for children are generally light-hearted, with a focus on fun and with less emphasis on long periods of silence. They are typically grounded in concrete experience, with less time spent on enquiry (the unpacking of experiences) (Weare, 2013). Concrete activities such as "rocking a stuffed animal to sleep while breathing" (Kaiser Greenland, 2010) or "sitting still like a frog" (Snel, 2013) help children to be still, relax and notice what is going on in mind and body</p> <p><i>Research evidence</i> Evaluations show that school-based mindfulness can be successful in both the prevention and treatment for childhood mental health difficulties, with reductions noted on measures of anxiety, stress and depression. Mindfulness has also been found to enhance cognitive functioning particularly in the area of attention regulation (see O'Toole <i>et al.</i>, 2017 for an overview of relevant research)</p>	<p>"FRIENDS for Life" is a standardised emotional resilience programme based on cognitive behavioural therapy (CBT) principles, which aims to prevent and treat depression and anxiety in school age children (Barrett <i>et al.</i>, 2000). It has been designed to be facilitated by classroom teachers as well as mental health professionals</p> <p>FRIENDS for Life is delivered over ten sessions and has three main components based on CBT principles: first, learning/behaviour, which involves helping children to solve problem, use coping skills, identify positive role models and support networks; second, cognition, such as helping children to use positive self-talk, challenge negative self-talk; and third, physiology, which involves teaching children to be aware of their body clues and use relaxation techniques</p> <p>Studies have found reductions in anxiety for up to four years after completing the programme, which has led the World Health Organisation to cite "FRIENDS for Life" as the only evidence-based programme effective at all levels of intervention for anxiety in children (World Health Organization Report on Prevention of Mental Disorders, 2004)</p>

pedagogy in the spirit of Freire (1970, 1974). In doing so, it must be recognised that critical pedagogy is but one example of a distinctly educational approach that links to the promotion of well-being; educational theorists and practitioners could suggest numerous others (by drawing on areas like citizenship, voice and participation, service learning, ethics of care, etc.). However, psychosocial interventions and critical pedagogy are perhaps most clearly positioned as being at odds with each other, and therefore, there is much to be gained by bringing these two approaches into conversation. If researchers and theorists aligned to these viewpoints can enter into meaningful dialogue, then the path is paved for those offering a range of other approaches.

Psychosocial interventions: the promise and perils

Over the last two decades, there has been considerable growth in mental health research and interventions and there are currently thousands of school-based mental health interventions in operation around the world (Weare and Nind, 2011). In many jurisdictions there are strong calls for "evidence-based programmes" that are supported by rigorous research and evaluation (e.g. Langley *et al.*, 2010). Among the most popular and widely researched school-based interventions are mindfulness-based programmes and the FRIENDS for Life programme, which are based on the principles of cognitive behaviour therapy (Barrett *et al.*, 2000). Table I provides a brief illustrative overview of each of these approaches.

Research into the effectiveness of school-based interventions is burgeoning. While much of this work has focused on the effectiveness of discrete interventions, there is now a growing interest in developing a broader understanding of the characteristics of successful school-based mental health initiatives (Macnab *et al.*, 2014; Rowling, 2009; Stewart-Brown, 2006; Weare and Nind, 2011; Wells *et al.*, 2003). For instance, Weare and Nind (2011) reviewed 52 existing reviews and found that, in general, school-based mental health interventions had small-to-moderate, short-term positive effects on a range of mental health, social, emotional and educational outcomes. There was general consensus across reviews that the teaching of skills and competencies (such as those highlighted in Table I) is a central part of any comprehensive and effective intervention. Furthermore, successful programmes tend to have explicit, specific, well-defined goals, and are underpinned by coherent, well-established principles and a sound theoretical base (Browne *et al.*, 2004; Weare and Nind, 2011).

Another key determinant of the success appears to be effective implementation (Barry and Jenkins, 2007; Rowling and Samdal, 2011). Many studies show that complete and accurate implementation leads to more positive outcomes, suggesting that fidelity to programmes is important. On the other hand, it is also acknowledged that the involvement of teachers and children in programme content or delivery may be crucial for ensuring that initiatives address the needs of the local school community and are sustainable in the long term (Weare and Nind, 2011). This latter focus on end-user involvement, which draws on values of participation and democracy, is reflective of the ethos encapsulated by health-promoting schools. These schools emphasise the importance of bottom-up actions that are initiated by schools themselves, which suggest a place for flexible and less prescriptive programmes. Nevertheless, fidelity to prescribed programmes continues to emerge as an important theme in the literature, hence there is increasing interest in harnessing insights from implementation science to explore the transfer and sustainability of evidence-based programmes in complex real-world settings (Durlak and DuPre, 2008; Fixsen *et al.*, 2005; Greenhalgh *et al.*, 2004).

It is clear that the types of evidence-based psychosocial interventions, currently endorsed across primary and second-level schools, have a valuable role in promoting positive mental health. They tend to offer a range of interesting, well-designed activities and are often associated with noticeable improvements in children's coping skills, at least in the short-term. For schools seeking to respond to children's distress, these discrete programmes offer considerable promise and garner widespread support. However, psychosocial interventions have a number of limitations that also warrant explication.

Undermining the centrality of relationships?

Current models of psychosocial interventions tend to privilege the acquisition of various skills/competencies and place considerable focus on the technicalities of programme delivery and implementation. In so doing, there is a risk that they displace the centrality of the ordinary, everyday interactions that children experience with teachers and peers. Research from dynamic systems perspectives highlights the fact that approaches to improving children's well-being cannot be separated from the relationships systems within which children develop (Granic, 2008). In fact, the most important aspect of any programme may not be the skills and competencies *per se*, but the ways in which teachers and children who are involved in the programme, mutually and simultaneously engage with programme content, and in turn, adjust in their relationships to each other over time. Change is not the result of teaching content in a step-by-step, pre-planned sequence, rather it emerges based on shared convergence or divergence between people and may happen "in the moment" when people are fully engaged with each other (Fogel *et al.*, 2008). Given the continued emphasis on discrete interventions and skill sets, it is unsurprising that there is currently little evidence for long-term sustainable effects, at least in the absence of "booster sessions" which aim to "top up" an intervention by regularly revisiting the learning at later points in time (Weare and Nind, 2011).

The focus on skills/competencies and programme implementation has necessitated specific training courses for teachers to equip them to deliver programmes with fidelity. Such training is not problematic in and of itself, but there is a danger that it gives way to the idea that only those teachers who have undertaken the relevant training have the competence to respond to children with mental health difficulties. The “expert knowledge” gained on such courses tends to be valued to a greater degree than teachers’ own experiential knowledge and professional judgement. Ultimately, this may be disempowering, especially if it undermines teachers’ own capacity to respond to children’s distress with humanity and compassion. Indeed, Hammersley (2004) cautions that while it is assumed that evidence-based practice enhances professionalism, its devaluing of experience and professional judgement may in fact lead to a weakening of professional practice. Hence, there is a need to reassert the centrality of relationships, recognising that the most effective teachers are those who can adjust dynamically and creatively to specific circumstances, while still using their skill sets and accrued wisdom (Fogel *et al.*, 2008). Psychosocial programmes need to acknowledge the experiential knowledge and professional judgement of teachers and find ways to promote ethical, in-the-moment responses to the needs of children within their particular ecological contexts.

Individualistic and de-contextualised?

It has been widely recognised that school-based mental health interventions are more successful when programmes are embedded within a whole-school approach, rather than implemented as a curriculum “add-on”. Clarke and Barry (2015) argue that a focus on discrete programmes is not enough and that for optimal impact, skill work needs to be embedded within a whole-school, multi-modal approach. However, most of the studies within the field continue to focus on classroom-based or topic-based programmes and neglect the more wide-reaching features of the health-promoting school approach (Simovska, 2012b). Indeed, in their review of primary prevention programs, Durlak and Wells (1997) found that 85 per cent of the 177 interventions for children and adolescents targeted individuals rather than their environment.

As illustrated in Table I, school-based mental health programmes target children’s individual thoughts, emotions and physiological states. Thus, as part of mindfulness and CBT-type activities, children are supported to notice and interrupt negative thought patterns, recognise physiological signs of anxiety and learn how to relax the body. As such, these programmes teach children how to adapt to and cope with the stressors they experience. Yet many of these “stressors” are rooted in social inequalities and emerge as a result of children’s relatively marginalised position in society (Greene, 2015). Children’s distress occurs in relation to social and cultural institutions and therefore solutions cannot be located solely within individuals. Indeed, by suggesting that the solution to children’s distress lies in altering children’s own thoughts and emotions, intervention programmes are in danger of reinforcing a form of rugged individualism – the idea that individuals can change their circumstances by sheer dint of personal effort. As such, they maintain the status quo by placing the burden for change on children, thereby letting political and social institutions off the hook. This prompts the need for a critical approach, which foregrounds social justice and illuminates a distinctly educational vision for change.

Advancing positive mental health through education: the role of critical pedagogies

Since the pioneering work of Paulo Freire (1970, 1974, 1994) in Brazil, it has been acknowledged that individual and collective well-being can be enhanced through educational practices that are grounded in bottom-up processes of empowerment, democracy and participation. Freire and other critical social theorists have been instrumental in drawing attention to structures and processes that maintain dominant and oppressive traditions (Freire, 1974; hooks, 1994; Moane, 2011). Such theorists are acutely aware that mental health difficulties are more likely amongst oppressed and marginalised groups; hence, critical awareness of

oppressive conditions is central in any attempts to improve well-being. Prescriptive solutions by detached experts are not the answer, precisely because experts often form part of the dominant, powerful and oppressive culture. Marginalised groups must apprehend reality in their own way and must themselves become agents in a process that Freire calls “consentization”. These perspectives and approaches are typically set in opposition to those that underpin psychosocial intervention, as outlined in Table II.

Although Freire worked predominantly with adults, there is considerable interest in adopting Friirian principles in primary and second-level school curricula. Freire (1970) suggested a “problem-posing” model whereby participants engage in dialogue around themes, work together to connect the issues to their own lives and take individual or collective actions to improve their situations. Such work is always related to the specificity of particular school communities, including the available resources, the histories that students and teachers bring with them to the classroom, and the diverse experiences and identities they inhabit (Giroux, 2011).

Psychosocial interventions	Critical pedagogy
<i>Aim</i> Reduce psychological distress; strengthen well-being, coping and resilience	Support people to apprehend their own situations and empower them to take action to enhance their own well-being and that of others
<i>Key features</i> Individualistic: emphasis is on the self; one’s own thoughts and emotions Universal: principles assumed to be transferrable across time and place Top-down: interventions are developed by “experts” and delivered to end-users in standardised formats	Collective: emphasis on self and others, with commitment to citizenship and democracy Particular: involves a situated understandings of the challenges encountered by individuals/groups and tailored responses to their unique needs Bottom-up: actions are participatory; designed and initiated by those intended to benefit
<i>Values</i> Assumed to be objective, value neutral	Explicit values of social justice, equality, participation and inclusion
<i>Why schools?</i> Schools are convenient sites for reaching all children as well as specific target groups	Schools are fundamentally about education, which has the potential to transform the lives of individuals and groups
<i>Role of teacher/educator</i> Implementer of prescribed (often manualised) programme	Equal partner in a negotiated curriculum and a “power sharing” classroom
<i>State of research and support</i> Processes and mechanisms underpinning the effectiveness of interventions tend to be clearly specified Supported by theory and rigorous research and evaluation Strength of evidence on key outcome measures means that these approaches are attractive to policy makers and stakeholders	Processes and mechanisms underpinning empowerment practices tend to be vague and elusive Strong theoretical rationale but a dearth of empirical research Lack of robust research coupled with broad, idealistic goals and unspecified/open-ended outcomes makes approach seem unworkable
<i>Worldview/epistemology</i> Positivist/neo-positivist paradigm, which assumes that there is an objective reality that can be observed, measured and understood outside of its social context	Interpretivist/transformational paradigm, which views phenomena as socially constructed and challenges the idea of fixed realities and objective truths

Table II.
Comparison of psychosocial interventions and critical pedagogy in school-based mental health promotion

Broadly consistent with this approach are current conceptualisations of critical health literacy. While health literacy has been defined in different ways, most definitions focus on people's ability to become empowered to take care of their own health and the health of others (Chinn, 2011; Nutbeam, 1998, 2000, 2008; Paakkari, 2015; St Leger, 2001). There is an important distinction between functional health literacy, which is about providing basic information necessary for health choices, and critical health literacy, which brings about a capacity to change living conditions so as to contribute to better health for oneself and for others (Paakkari, 2015). The former involves the transmission of knowledge about health from teachers to students, which is akin to the "banking" model of education whereby knowledge is deposited in pupils' heads, much like money into a bank (Freire, 1970). The latter involves consideration of the social, economic, educational and cultural determinants of health, and promotes social justice by prompting the taking of individual or collective actions that change those determinants (Chinn, 2011; Nutbeam, 1998).

Paakkari and Paakkari (2012) make an important contribution in conceptualising the health literacy concept in educational contexts, and advocating for the inclusion of critical health literacy as a learning outcome. They propose that health literacy is composed of five distinct components: theoretical knowledge, practical knowledge, critical thinking, self-awareness and citizenship; and they provide practical illustrations of what critical health literacy might "look like" in classroom contexts. Their approach is one that seeks to educate pupils to be critical and active citizens who will be able to seek, evaluate and construct knowledge, use this knowledge to make ethically informed decisions, as well as take actions that benefit not just themselves, but also other people and the broader community (Paakkari and Paakkari, 2012). Along similar lines, Matthews (2014) discusses how Freire's ideas can be combined with pedagogical techniques and she makes a case for an explicitly Friiran critical pedagogy in health education. These authors offer valuable insights and much needed suggestions regarding how a critical pedagogy for health education might be realised in classroom contexts. However, considerable challenges remain.

Challenges for critical pedagogy approaches

The literature on critical health literacy in health education tends to focus on physical health. There is much less work that is specific to mental health literacy, and what is available tends to focus on basic functional literacy aimed at improving recognition of mental health conditions and prompting help-seeking behaviour (Wei *et al.*, 2015). While the domains of physical and mental health overlap, the neglect of mental health is a significant gap, not least because the issues tend to be particularly sensitive and are often difficult to broach. Without adequate theorising, empirical research and practical guidance, teachers seeking responsive solutions for children with psychological problems have little recourse except to discrete psychosocial interventions.

Critical pedagogies require a major shift in current thinking, especially in relation to how schools are organised, how curricula are designed/negotiated and to widespread practices that cast students and teachers in "us/them" relationships. Critical pedagogies emphasise the need for a social critique of power to enable understandings of the structural and ideological forces that impact well-being and give rise to mental health disparities. Karavoltsov (2015) argues that in order for children and young people to understand the social and political structures that constitute their lives, they must begin with those structures that they have direct experience of. This means that:

[...] teachers must enable children to identify and understand the power that they, the teachers, have over them; the strategies and tactics by which this power is exercised and paradoxically the strategies and tactics by which they could be empowered to take over their own learning (p. 171).

School support for such a proposal may be quite far off. Theorists like Freire (1970) and Foucault (1977) have persuasively discussed how schools can be oppressive environments for children and young people and indeed, studies show that many schools continue to be characterised by huge power differentials, autocratic structures and a lack of democratic participation (Horgan *et al.*, 2015; Leitch and Mitchell, 2007; Lundy, 2007).

Even when schools work towards creating safe, inclusive and democratic spaces for learning, there is a danger that power differentials remain. Such differentials include not just those between teachers and students, but also amongst students themselves. Indeed, it is recognised that children and young people's relationships are often characterised by status hierarchies (Rodkin and Hodges, 2003), and thus, there remains the potential for the voices and agendas of more dominant members to prevail. The pursuit of one topic or agenda over others, particularly in a learning environment that is ostensibly democratic and inclusive, may serve to perpetuate unequal relationships and reinforce the marginalisation of those whose experiences are not reflected in the topics chosen for discussion (Ellsworth, 1989).

Furthermore, it must be recognised that in drawing attention to power relations and injustices, critical pedagogy has the potential to open up a range of unsettling or even distressing emotions such as anger, hopelessness, despair and guilt (Berila, 2016). Inequalities impact young people's lives in multifaceted and complex ways and they are not often within the power of individuals to change in any substantive way. Thus, it is possible that raising awareness of such issues without concomitant attention to enhancing concrete coping skills could in fact lead to a decline in well-being. Hence, despite its broad and noble goals, none of what is imagined in critical pedagogy is straightforward in practice. The concepts underpinning critical pedagogy (empowerment, student involvement, democracy) are contested and open to multiple interpretations (Laverack and Wallerstein, 2001; Mohajer and Earnest, 2009). Very little attention is paid to unpacking the conceptual makeup of these skills or to how they may be linked to improvements in health and well-being (Chinn, 2011). This is an issue, particularly when it comes to younger children because although there is a large literature on youth empowerment, the process of empowerment in younger children has been neglected; perhaps because it is assumed that children do not need, or ought not possess power or control (Prilleltensky *et al.*, 2001).

Moving towards innovative and interdisciplinary school-based approaches

Both critical pedagogies and psychosocial interventions have considerable strengths, but also a number of weaknesses. Their differing worldviews are set in trenchant opposition, which presents sizable problems for researchers and practitioners in the field of school-based mental health, especially those interested in harnessing the disciplinary strengths from across health, psychology and education (O'Toole, 2016). However, there is scope for genuine dialogue and synergies across these perspectives. Indeed, Overton (2007) presents a meta-theoretical framework for dynamic systems theorists which challenges the polarised worldviews and Cartesian splits inherent in much contemporary theorising. Furthermore, the philosophy of critical realism (Bhaskar, 1978, 1986, 1989) provides a coherent framework that transcends epistemological divides and offers a range of new possibilities. Essentially, Bhaskar's critical realism represents a two-fold critique of established worldviews (positivism and interpretivism). Rather than posit a great divide between the natural and social sciences as is common, Bhaskar argues instead for the stratification of nature, in which lower order mechanisms can explain, but cannot replace higher levels of explanation. Neural and physiological mechanisms may help explain a child's anxiety, but they cannot replace, and are no more adequate than, explanations that draw on social or cultural mechanisms (thus critical realism is an emergent, non-reductionist philosophy). Furthermore, Bhaskar expounds the role of social sciences in human emancipation and societal transformation. Through sound empirical and theoretical enquiry, social sciences can critique commonly held explanations

and offer truer or better accounts, particularly accounts that expose the power and interest, which may be implicit in commonly held explanations. Thus, critical realism represents a defence of the critical and emancipatory potential of rational enquiry against both positivist and postmodern challenges (Collier, 1994) and offers a dialectical synthesis that might support interdisciplinary work around school-based mental health promotion.

In practical terms then, it may be fruitful to consider harnessing the strengths of approaches that at face value seem diametrically opposed. It should be possible to draw and build on the strengths of psychosocial interventions, but in ways that are more egalitarian and more committed to the promotion of social justice and development of solidarity. Such ideas are not new and have been drawn on in therapeutic contexts, particularly by feminist therapists (Ballou and Gabalac, 1985). Critical pedagogues are similarly recognising the importance of individual competencies to enable students to process and cope with the difficult emotions that may arise as part of meaningful critical dialogue. Mindfulness, for instance, has been advocated to support genuine dialogue in anti-oppression pedagogy in higher education (Berila, 2016). There is much in these areas of research and practice that could usefully be applied in school-based contexts.

A more concrete example might be found in programmes like *Free Being Me* (2017). *Free Being Me* is a cognitive-dissonance-based body-acceptance programme (supported by the World Association of Girl Guides and Girl Scouts and derived from a larger Body Project; Stice and Presnell, 2007). It is designed to help girls notice and resist socio-cultural pressures to conform to narrow and unrealistic norms of feminine beauty. Girls are also supported to take self/group-initiated actions within their communities to spread their message and support others in resisting social pressures. This type of programme serves as a useful model because it focuses not just on the thoughts and emotions that go on inside the heads of individuals, it also recognises the importance of forging alliances and connecting with broader civic society. Thus, in moving forward, there is a need for less blinkered approaches to school-based mental health promotion; approaches that enhance individual skill sets, but also open young people's eyes to the power structures (e.g. advertising and entertainment industries) that have a vested interest in the maintenance of particular beliefs and attitudes. Such programmes may give young people a better insight into their inner thoughts and emotions, as well as allow them to become more aware of, and more connected to, their broader social and cultural worlds. In building solidarity, this type of initiative might support young people to resist harmful media messages and collectively create positive change for themselves and others. It could be argued that given the range of interdisciplinary expertise in health education, the field is ideally placed to craft these types of school-based initiatives.

The field of school-based mental health also requires further conceptual analyses as well as empirical research using a range of different qualitative and quantitative methodologies. As noted by Davis (2004), the types of questions asked in education and related fields require a breadth and depth of knowledge that goes beyond any particular research methodology. Further work on critical pedagogies in school and classroom contexts is necessary in order to identify and unpack the processes underpinning these approaches as well as examine their symbiotic relationship with health and well-being. While there is a large volume of research on school-based interventions, most of this involves measuring the linear impact of discrete programmes on individual students (Clarke and Barry, 2015). Participatory and rights-based methods are needed in this field to ensure that interventions are initiated by or responsive to the children intended to benefit and to explore children's subjective experience of them (O'Connor, 2016). There is also a need for evaluation methods that capture the dynamic interplay between individuals and groups as well as the impacts of multiple interdependent initiatives, which might include both critical pedagogies and psychosocial interventions. Case studies and theory-based evaluation methods, including

realist evaluation (Pawson and Tilley, 1997), which emphasises the importance of processes and context, may be useful to this task.

Furthermore, although systematic reviews and research syntheses have been criticised for their positivist orientation and apparent “empty empiricism”, these approaches can provide a firmer foundation for primary empirical studies, challenge existing theories and provide a tool for sharpening conceptual categories in particular fields (Andrews, 2004). Systematic reviews can also take an explicit equality lens to investigate the impact of particular types of interventions on mental health inequalities (Kavanagh *et al.*, 2009, see also O’Toole *et al.*, 2017).

In conclusion, this paper has argued for a dynamic, emergent understanding of children’s mental health that is situated within children’s socio-historical and cultural contexts, and demonstrates a commitment to confronting the social injustices that impact children’s lives. It remains to be seen whether dynamic systems perspectives can be meaningfully integrated with critical pedagogies, and whether the confluence of these two approaches might offer fruitful avenues for research and practice. However, some authors are already suggesting valuable possibilities (Cofer, 2008; Evans, 2008; Haggis, 2008; Stirling and McGloin, 2015). Indeed, it is the central theme of this paper that a philosophical and theoretical convergence, together with an openness to learning from each other, has much to offer for the future of school-based mental health. As encapsulated in the Irish proverb: *Ní neart go cur le chéile*: there is no strength without unity.

Note

1. This paper recognises that in advocating for theories that challenge social inequalities, it is making a value statement which may sit uneasily with many in health and psychological sciences, since there is a longstanding tradition of viewing facts (which can be uncovered by science or reason) and values (judgements about what ought to be) as entirely separate. However, in recent decades, support for a fact/value distinction has begun to collapse, in part because it has been recognised, both in the natural and social sciences, that areas chosen for investigation can be determined by contentious ideological interests. Also, if researchers succeed in uncovering truer or better accounts of the causes of human distress, then there is no great leap involved in moving to criticise those causes. See Bhaskar (1986) and Putnam (2002) for a discussion of the issues.

References

- Andrews, R. (2004), “Between Scylla and Charybdis: the experience of undertaking a systematic review in education”, in Thomas, G. and Pring, R. (Eds), *Evidence-Based Practice in Education*, Open University Press, Berkshire, pp. 65-76.
- Baer, R.A. (2003), “Mindfulness training as a clinical intervention: a conceptual and empirical review”, *Clinical Psychology: Science and Practice*, Vol. 10 No. 2, pp. 125-143.
- Ballou, M. and Gabalac, N.W. (1985), *A Feminist Position on Mental Health*, Charles C Thomas, Springfield, IL.
- Barrett, P.M., Lowry-Webster, H. and Turner, C. (2000), *FRIENDS Program for Children: Participants Workbook*, Academic Press, Brisbane.
- Barry, M.M. and Jenkins, R. (2007), *Implementing Mental Health Promotion*, Elsevier Health Sciences.
- Benning, T.B. (2015), “Limitations of the biopsychosocial model in psychiatry”, *Advances in Medical Education and Practice*, Vol. 6, pp. 347-352.
- Berila, B. (2016), *Integrating Mindfulness into Anti-Oppression Pedagogy: Social Justice in Higher Education*, Routledge, New York, NY.
- Bhaskar, R. (1978), *A Realist Theory of Science*, Harvester Press, Brighton.
- Bhaskar, R. (1986), *Scientific Realism and Human Emancipation*, Verso, London.

- Bhaskar, R. (1989), *The Possibility of Naturalism*, Harvester Wheatsheaf, Hemel Hempstead.
- Borrell-Carrió, F., Suchman, A.L. and Epstein, R.M. (2004), "The biopsychosocial model 25 years later: principles, practice, and scientific inquiry", *Annals of Family Medicine*, Vol. 2 No. 6, pp. 576-582.
- Browne, G., Gafni, A., Roberts, J., Byrne, C. and Majumdar, G. (2004), "Effective/efficient mental health programs for school-age children: a synthesis of reviews", *Social Science and Medicine*, Vol. 58 No. 7, pp. 1367-1384.
- Chinn, D. (2011), "Critical health literacy: a review and critical analysis", *Social Science and Medicine*, Vol. 73 No. 1, pp. 60-67.
- Clarke, A.M. and Barry, M.M. (2015), "Implementing mental health promoting schools", in Simovska, V. and Mannix-McNamara, P. (Eds), *Schools for Health and Sustainability: Theory, Research and Practice*, Springer, Dordrecht, pp. 313-338.
- Cofer, L.F. (2008), "Dynamic views of education", in Fogel, A., King, B.J. and Shankar, S.G. (Eds), *Human Development in the Twenty-First Century: Visionary Ideas from Systems Scientists*, Cambridge University Press, Cambridge, pp. 128-135.
- Collier, A. (1994), *Critical Realism: An Introduction to Roy Bhaskar's Philosophy*, Verso, London.
- Cornish, F. (2004), "Making 'context' concrete: a dialogical approach to the society-health relation", *Journal of Health Psychology*, Vol. 9 No. 2, pp. 281-294.
- Davis, P. (2004), "Systematic reviews and the Campbell collaboration", in Thomas, G. and Pring, R. (Eds), *Evidence-Based Practice in Education*, Open University Press, Berkshire, pp. 21-33.
- Deweese, M. and Lax, K. (2008), "A critical approach to pedagogy in mental health", *Social Work in Mental Health*, Vol. 7 Nos 1-3, pp. 82-101.
- Dooris, M. (2009), "Holistic and sustainable health improvement: the contribution of the settings-based approach to health promotion", *Perspectives in Public Health*, Vol. 129 No. 1, pp. 29-36.
- Durlak, J.A. and DuPre, E.P. (2008), "Implementation matters: a review of research on the influence of implementation on program outcomes and the factors affecting implementation", *American Journal of Community Psychology*, Vol. 41 Nos 3-4, pp. 327-350.
- Durlak, J.A. and Wells, A. (1997), "Primary prevention mental health programs for children and adolescents: a meta-analytic review", *American Journal of Community Psychology*, Vol. 25 No. 2, pp. 115-152.
- Ellsworth, E. (1989), "Why doesn't this feel empowering: working through the repressive myths of critical pedagogy", *Harvard Educational Review*, Vol. 59 No. 3, pp. 297-324.
- Engel, G.L. (1977), "The need for a new medical model: a challenge for biomedicine", *Science*, Vol. 196 No. 4286, pp. 129-136.
- Evans, G. (2008), "Learning about human development from a study of educational failure", in Fogel, A., King, B.J. and Shankar, S.G. (Eds), *Human Development in the Twenty-First Century: Visionary Ideas from Systems Scientists*, Cambridge University Press, Cambridge, pp. 119-127.
- Fazel, M., Patel, V., Thomas, S. and Tol, W. (2014), "Mental health interventions in schools in low-income and middle-income countries", *The Lancet Psychiatry*, Vol. 1 No. 5, pp. 388-398.
- Fixsen, D.L., Naoom, S.F., Blasé, K.A., Friedman, M.R. and Wallace, F. (2005), *Implementation Research: A Synthesis of the Literature*, University of South Florida, Louis de la Parte Florida Mental Health Institute, The National Implementation Research Network, Tampa, FL.
- Fogel, A. and Kawai, M. (2008), "Current problems for Japanese youth: some possible pathways for alleviating these problems from the perspective of dynamic systems theory", in Fogel, A., King, B.J. and Shankar, S.G. (Eds), *Human Development in the Twenty-First Century: Visionary Ideas from Systems Scientists*, Cambridge University Press, Cambridge, pp. 188-199.
- Fogel, A., Greenspan, S.I., King, B.J., Lickliter, P.R., Reygads, P., Shanker, S.G. and Toren, C. (2008), "A dynamic approach to the life sciences", in Fogel, A., King, B.J. and Shankar, S.G. (Eds), *Human Development in the Twenty-First Century: Visionary Ideas from Systems Scientists*, Cambridge University Press, Cambridge, pp. 235-253.

- Ford, T., Hamilton, H., Meltzer, H. and Goodman, R. (2008), "Predictors of service use for mental health problems among British schoolchildren", *Child and Adolescent Mental Health*, Vol. 13 No. 1, pp. 32-40.
- Foucault, M. (1977), *Discipline and Punish: The Birth of the Prison*, Vintage Books, New York, NY.
- Free Being Me (2017), "Home page", available at: www.free-being-me.com (accessed 14 May 2017).
- Freire, P. (1970), *Pedagogy of the Oppressed*, Penguin, London.
- Freire, P. (1974), *Education for Critical Consciousness*, Continuum, New York, NY.
- Freire, P. (1994), *Pedagogy of Hope: Reliving Pedagogy of the Oppressed*, Bloomsbury, New York, NY.
- Giroux, H.A. (2011), *On Critical Pedagogy*, Bloomsbury Publishing, New York, NY.
- Granic, I. (2008), "A dynamic systems approach to understanding family and peer relationships: implications for effective interventions with aggressive youth", in Fogel, A., King, B.J. and Shankar, S.G. (Eds), *Human Development in the Twenty-First Century: Visionary Ideas from Systems Scientists*, Cambridge University Press, Cambridge, pp. 216-224.
- Green, H., McGinnity, A., Meltzer, H., Ford, T. and Goodman, R. (2005), *Mental Health of Children and Young People in Great Britain, 2004*, Palgrave MacMillan, London.
- Greene, S. (2015), *The Psychological Development of Girls and Women: Rethinking Change in Time*, Routledge, New York, NY.
- Greenhalgh, T., Glenn, R., Macfarlane, F., Bate, P. and Kyriakidou, O. (2004), "Diffusion of innovations in service organizations: systematic literature review and recommendations for future research", *Milbank Quarterly*, Vol. 82 No. 4, pp. 581-629.
- Greenspan, S.I. (2008), "A dynamic developmental model of mental health and mental illness", in Fogel, A., King, B.J. and Shankar, S.G. (Eds), *Human Development in the Twenty-First Century: Visionary Ideas from Systems Scientists*, Cambridge University Press, Cambridge, pp. 157-175.
- Haggis, T. (2008), "Knowledge must be contextual: some possible implications of complexity and dynamic systems theories for educational research", *Educational Philosophy and Theory*, Vol. 40 No. 1, pp. 158-176.
- Hammersley, M. (2004), "Some questions about evidence-based practice in education", in Thomas, G. and Pring, R. (Eds), *Evidence-Based Practice in Education*, Open University Press, Berkshire, pp. 133-149.
- Harden, A., Rees, R., Shepherd, J., Brunton, V., Oliver, S. and Oakley, A. (2001), *Young People and Mental Health: A Systematic Review of Barriers and Facilitators*, EPPI-Centre, Social Science Research Unit, Institute of Education, University of London, London.
- hooks, b. (1994), *Teaching to Transgress: Education as the Practice of Freedom*, Routledge, London.
- Horgan, D., Forde, C., Parkes, A. and Martin, S. (2015), *Children and Young People's Everyday Experiences of Participation in Decision-Making at Home, in School and in their Communities*, DCYA, Dublin.
- Huppert, F.A. (2009), "Psychological well-being: evidence regarding its causes and consequences", *Applied Psychology: Health and Well-Being*, Vol. 1 No. 2, pp. 137-164.
- Kabat-Zinn, J. (1990), *Full Catastrophe Living*, Random House, New York, NY.
- Kaiser Greenland, S. (2010), *The Mindful Child: How to Help Your Kid Manage Stress and Become Happier, Kinder, and More Compassionate*, Free Press, New York, NY.
- Karavoltsov, A. (2015), "Drama-based learning for teachers' education in health promotion", in Simovska, V. and Mannix-McNamara, P. (Eds), *Schools for Health and Sustainability: Theory, Research and Practice*, Springer, Dordrecht, pp. 155-190.
- Kavanagh, J., Oliver, S., Lorenc, T., Caird, J., Tucker, H. and Harden, A. (2009), "School-based cognitive-behavioural interventions: a systematic review of effects and inequalities", *Health Sociology Review*, Vol. 18 No. 1, pp. 61-78.

- Kuyken, W., Weare, K., Ukoumunne, O.C., Vicary, R., Motton, N., Burnett, R., Cullen, C., Hennelly, S. and Huppert, F. (2013), "Effectiveness of the mindfulness in schools programme: non-randomised controlled feasibility study", *British Journal of Psychiatry*, Vol. 203 No. 2, pp. 126-131.
- Langley, A.K., Nadeem, E., Kataoka, S.H., Stein, B.D. and Jaycox, L.H. (2010), "Evidence-based mental health programs in schools: barriers and facilitators of successful implementation", *School Mental Health*, Vol. 2 No. 3, pp. 105-113.
- Laverack, G. and Wallerstein, N. (2001), "Measuring community empowerment: a fresh look at organizational domains", *Health Promotion International*, Vol. 16 No. 2, pp. 179-185.
- Leitch, R. and Mitchell, S. (2007), "Caged birds and cloning machines: how student imagery 'speaks' to us about cultures of schooling and student participation", *Improving Schools*, Vol. 10 No. 1, pp. 53-71.
- Lerner, R.M. and Overton, W.F. (2008), "Exemplifying the integrations of the relational developmental system synthesizing theory, research, and application to promote positive development and social justice", *Journal of Adolescent Research*, Vol. 23 No. 3, pp. 245-255.
- Lerner, R.M., Dowling, E.M. and Anderson, P.M. (2003), "Positive youth development: thriving as the basis of personhood and civil society", *Applied Developmental Science*, Vol. 7 No. 3, pp. 172-180.
- Lundy, L. (2007), "'Voice' is not enough: conceptualising article 12 of the United Nations convention on the rights of the Child", *British Educational Research Journal*, Vol. 33 No. 6, pp. 927-942.
- Macnab, A.J., Gagnon, F.A. and Stewart, D. (2014), "Health promoting schools: consensus, strategies, and potential", *Health Education*, Vol. 114 No. 3, pp. 170-185.
- Matthews, C. (2014), "Critical pedagogy in health education", *Health Education Journal*, Vol. 73 No. 5, pp. 600-609.
- Merikangas, K.R., Nakamura, E. and Kessler, R.C. (2009), "Epidemiology of mental disorders in children and adolescents", *Dialogues in Clinical Neuroscience*, Vol. 11 No. 1, pp. 7-20.
- Moane, G. (2011), *Gender and Colonialism: A Psychological Analysis of Oppression and Liberation*, Palgrave Macmillan, London.
- Mohajer, N. and Earnest, J. (2009), "Youth empowerment for the most vulnerable: a model based on the pedagogy of Freire and experiences in the field", *Health Education*, Vol. 109 No. 5, pp. 424-438.
- Nutbeam, D. (1998), "Evaluating health promotion progress, problems and solutions", *Health Promotion International*, Vol. 13 No. 1, pp. 27-43.
- Nutbeam, D. (2000), "Health literacy as a public health goal: a challenge for contemporary health education and communication strategies into the 21st century", *Health Promotion International*, Vol. 15 No. 3, pp. 259-267.
- Nutbeam, D. (2008), "The evolving concept of health literacy", *Social Science and Medicine*, Vol. 6 No. 12, pp. 2072-2078.
- O'Connor, F. (2016), "Children's perspectives of mindfulness using a children's rights approach", Unpublished MEd dissertation, Maynooth University, Maynooth.
- O'Toole, C. (2016), "Opening the conversation about children's well-being: tensions, confluences and possibilities in school-based mental health promotion", paper presented as part of the "Interventions to Promote Wellbeing: Schools and Community" symposium, held at the European Conference of Educational Research, Dublin, 22-26 August.
- O'Toole, C., Furlong, M., McGilloway, S. and Bjørndal, A. (2017), "Preschool and school-based mindfulness programmes for improving mental health and cognitive functioning in young people aged 3 to 18 years", *Cochrane Database of Systematic Reviews* No. 1, Dublin.
- Orford, J. (2008), *Community Psychology: Challenges, Controversies and Emerging Consensus*, John Wiley & Sons, Sussex.
- Overton, W.F. (2007), "A coherent metatheory for dynamic systems: relational organicism-contextualism", *Human Development*, Vol. 50 Nos 2-3, pp. 154-159.

- Overton, W.F. and Learner, R.M. (2014), "Fundamental concepts and methods in developmental science: a relational perspective", *Research in Human Development*, Vol. 11 No. 1, pp. 63-73.
- Paakkari, L. (2015), "Three approaches to school health education as a means to higher levels of health literacy", in Simovska, V. and Mannix-McNamara, P. (Eds), *Schools for Health and Sustainability: Theory, Research and Practice*, Springer, Dordrecht, pp. 275-290.
- Paakkari, L. and Paakkari, O. (2012), "Health literacy as a learning outcome in schools", *Health Education*, Vol. 112 No. 2, pp. 133-152.
- Pawson, R. and Tilley, N. (1997), *Realistic Evaluation*, Sage, London.
- Prilleltensky, I., Nelson, G. and Peirson, L. (2001), "The role of power and control in children's lives: an ecological analysis of pathways toward wellness, resilience and problems", *Journal of Community and Applied Social Psychology*, Vol. 11 No. 2, pp. 143-158.
- Putnam, H. (2002), *The Collapse of the Fact/value Dichotomy and Other Essays*, Harvard University Press, Harvard, MA.
- Rodkin, P.C. and Hodges, E.V.E. (2003), "Bullies and victims in the peer ecology: four questions for psychologists and school professionals", *School Psychology Review*, Vol. 32 No. 3, pp. 384-400.
- Rowling, L. (2009), "Strengthening 'school' in school mental health promotion", *Health Education*, Vol. 109 No. 4, pp. 357-368.
- Rowling, L. and Samdal, O. (2011), "Filling the black box of implementation for health-promoting schools", *Health Education*, Vol. 111 No. 5, pp. 347-362.
- Simovska, V. (2012a), "Case study of a participatory health promoting intervention in school", *Democracy & Education*, Vol. 20 No. 1, pp. 1-10.
- Simovska, V. (2012b), "What do health-promoting schools promote? Processes and outcomes in school health promotion", *Health Education*, Vol. 112 No. 2, pp. 84-88.
- Simovska, V. and Mannix-McNamara, P. (2015), *Schools for Health and Sustainability: Theory, Research and Practice*, Springer, Dordrecht.
- Snel, E. (2013), *Sitting Still Like a Frog: Mindfulness Exercises for Kids (and Their Parents)*, Shambhala Publications, New York, NY.
- Snell, T., Knapp, M., Healey, A., Guglani, S., Evans-Lacko, S., Fernandez, J.L., Meltzer, H. and Ford, T. (2013), "Economic impact of childhood psychiatric disorder on public sector services in Britain: estimates from national survey data", *Journal of Child Psychology and Psychiatry*, Vol. 54, pp. 977-985.
- Stewart-Brown, S. (2006), "What is the evidence on school health promotion in improving health or preventing disease and, specifically, what is the effectiveness of the health promoting school's approach?", WHO Regional Office for Europe, Health Evidence Network Report, Copenhagen.
- Stice, E. and Presnell, K. (2007), *The Body Project: Promoting Body Acceptance and Preventing Eating Disorders*, Oxford University Press, New York, NY.
- Stirling, J. and McGloin, C. (2015), "Critical pedagogy and social inclusion policy in Australian higher education: identifying the disjunctions", *Radical Pedagogy*, Vol. 12 No. 2, pp. 1-20.
- St Leger, L. (2001), "Schools, health literacy and public health: possibilities and challenges", *Health Promotion International*, Vol. 16 No. 2, pp. 197-205.
- Weare, K. (2013), "Developing mindfulness with children and young people: a review of the evidence and policy context", *Journal of Children's Services*, Vol. 8 No. 2, pp. 141-153.
- Weare, K. and Nind, M. (2011), "Mental health promotion and problem prevention in schools: what does the evidence say?", *Health Promotion International*, Vol. 26 No. S1, pp. 29-69.
- Wei, Y., McGrath, P.J., Hayden, J. and Kutcher, S. (2015), "Mental health literacy measures evaluating knowledge, attitudes and help-seeking: a scoping review", *BMC Psychiatry*, Vol. 17 No. 1, pp. 15-29.
- Wells, J., Barlow, J. and Stewart-Brown, S. (2003), "A systematic review of universal approaches to mental health promotion in schools", *Health Education*, Vol. 103 No. 4, pp. 197-220.

-
- Whitelaw, S., Braxendale, A., Bryce, C., Macardy, L., Young, I. and Witney, E. (2001), "‘Settings’ based health promotion: a review", *Health Promotion International*, Vol. 16 No. 4, pp. 339-353.
- WHO (1986), "Ottawa charter for health promotion", *Adopted at an International Conference on Health Promotion – The Move Towards a New Public Health (cosponsored by the Canadian Public Health Association, Health and Welfare Canada and the World Health Organization)*, 17-21 November.
- WHO (1998), *Health Promoting Schools: A Healthy Setting for Living Learning and Working. WHO Global School Health Initiative*, World Health Organization, Geneva.
- WHO (2001), *The World Health Report 2001. Mental Health: New Understanding, New Hope*, World Health Organization, Geneva.
- World Health Organization Report on Prevention of Mental Disorders (2004), "Effective Interventions and Policy Options Summary Report", Department of Mental Health and Substance Abuse in collaboration with the Prevention Research Centre of the Universities of Nijmegen and Maastricht, Geneva.

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