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ORIGINAL PRACTICE DEVELOPMENT AND RESEARCH

Is it possible to bring the emancipatory practice development and evidence-based practice agendas together in nursing and midwifery?

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Abstract
Background: The emancipatory practice development and evidence-based practice movements play significant roles in driving today's nursing and midwifery practice and knowledge development agendas. Often, however, they are characterised as philosophically opposed to one another.
Aims and objectives: To provide an overview of the philosophical and epistemological background to these two movements and locate them in relation to today's overall nursing knowledge and practice development environment.
Methods: Literature review, case study and model advance.
Findings: The paper argues that a mutualised evidence-based emancipatory practice development (EBEPD) is today both practical and achievable, and proposes a convergent model. The EBEPD model is discussed with particular reference to contemporary philosophical debate in nursing, some of which positions positivism (a primary underpin to evidence-based practice) and critical realism (a primary underpin to emancipatory practice development) as epistemologically irreconcilable.
Conclusion and implications for practice: Significant knowledge and practice development opportunities are likely to emerge from working to bring together these two fundamentally important and arguably symbiotic movements in healthcare.

Keywords: Nursing, midwifery, emancipatory practice development, evidence-based practice, positivism, critical realism

Introduction
Both the emancipatory practice development (EPD) and evidence-based practice (EBP) movements have received significant attention and resource commitments in healthcare in recent decades. EBP arose as evidence-based medicine in the 1980s in response to biomedically centred concerns that randomised controlled trial evidence was not being synthesised and finding its way into routine clinical practice (Sackett et al., 1996). Since then, a generalised movement driving the routinised incorporation of best research evidence into practice decision making processes, has spread across all of the healthcare disciplines. EPD was first established in the context of public education (Habermas, 1984) and arose in non-medical healthcare domains, principally nursing and midwifery in the 1990s. A movement that explicitly aims to empower clinicians to make critically informed decisions, EPD's concern was and remains to drive change and development in the healthcare delivery arena, which is understood as being subject to socio-culturally defined hegemonies that stifle growth and change (Manley et al., 2013).

In terms of their epistemological provenance, the EPD and EBP movements lie at opposite poles. EBP is a product of material science, while EPD is a product of social science. In terms of their healthcare-located intent, they lie alongside one another, as both are fundamentally concerned with improving health service delivery. In terms of functional operationalisation in the healthcare world, EBP is translational in nature. It typically relies on knowledge and practice support via capacity-building education and the development of policy and guideline material that is evidence-based and clinically accessible. EPD is action-oriented and transformational, relying on the development and maintenance of critical and progressive clinical practice cultures, which, because of their socio-cultural positioning, are well placed to drive change and growth in healthcare practice (Manley et al., 2013).

EBP's core concern is to establish the most effective interventions and implement them. A common criticism is that most of its effort has been centred on the first goal (establishing the most effective interventions) rather than the second – implementing them. Obversely, a common criticism of EPD is that it promotes context-specific (rather than absolutist) implementation well, but the science around what it implements is lacking. Such a polar scenario (EPD as 'yin' and EBP as 'yang', illustrated in Fig 1) suggests the potential for complementation and balance, as much as opposition. In this paper we propose that a convergent evidence-based EPD (EBEPD) is both desirable and achievable. In order to make this case, we must take account of the clash of philosophies that such a stand would need to address. Thus our goal is to explore the epistemological pre-cognitions that lie at the heart of each movement, to suggest where convergences and divergences exist and to propose a harmonised EBEPD model.

Figure 1: EPD as 'yin' and 'yan'
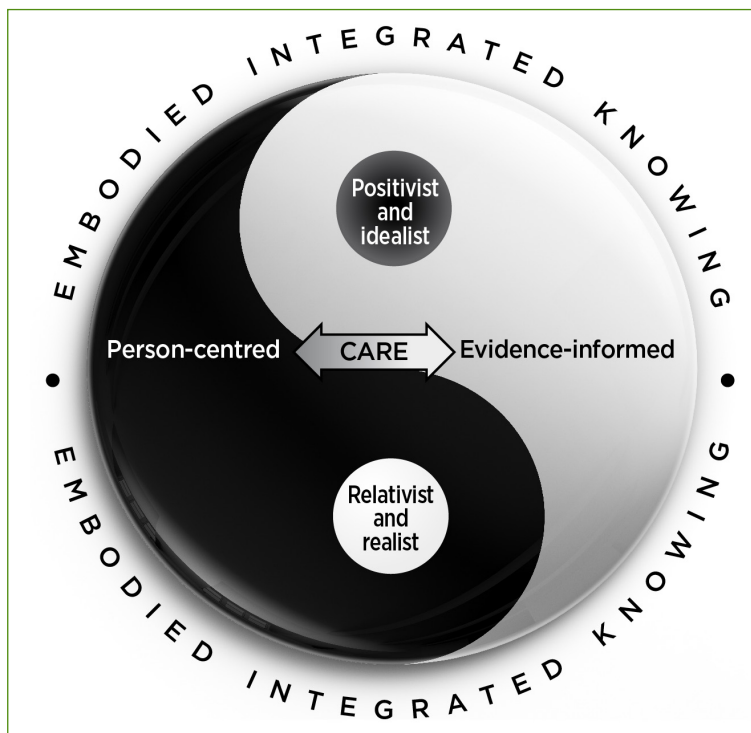
Background
Today it is a truism to say knowledge and practice are interlinked. In nursing and midwifery, practice is both humanistic and scientific in nature. The concept of empathic care lies at the heart of the nursing professional tradition as does skilled clinical procedural practice. It's not surprising that the range of knowledge used by nurses is as broad as their practice goals. The bringing together of nursing theory and practice in a 'praxis' (Rolfe, 1993), which is unique for each individual patient encounter, has been

advanced for some decades as a way forward in addressing theory-practice gaps in nursing. Notions of praxis have been persuasive in developing concepts of professional nursing that incorporate subjective practice drivers such as intuition and clinical wisdom into the orbit of professional practice.

Few would argue that nursing's wide-ranging mission demands knowledge formed both ontologically and epistemologically. Ontological knowledge is related to the nature of existence, and because of its concern with 'being' – rather than 'knowing' – (Heidegger, 1988), it is in many respects felt knowledge and remains central to nursing's status as a profession of carers (Rafferty, 1996; Watson and Smith, 2002). Human empathy, humanistic communication, intuition and negotiation of the spiritual are ontologically experienced; each of these is a daily concern of many nurses and midwives.

Philosophy

Epistemological knowledge is primarily related to cognitive knowledge. It is usually built over time as a result of research inquiry and results synthesis. New research is a principal driver of epistemological growth and development. Research questions can be deductively hypothesised or inductively suggested. Philosophy is important as it is typically the lens through which epistemological knowledge-builders (or researchers) seek the 'truth' and thus make their claims.

Positivist philosophy has at its core a Cartesian belief, first expressed in 17th century Europe, that truths can only be claimed if they can be measured or proxy-measured (Descartes, 1664). Positivism arose in response to the waning epistemological influence of Christianity at the time, where simple faith became epistemologically unacceptable to the rising bourgeois classes. Material science and the experimental method clearly rose from positivism; few would argue the profound influence these have made to the great 20th century developments in biomedicine, nor to the great industrial and technological developments that have been accruing since the 18th century (Lubchenco, 1998). When the truth being sought is of a causal nature, positivism demands the active employment of deductive reasoning – knowledge must be built iteratively on the basis of an unfolding series' of theory-testing study designs. Central to progress on cause and effect in biomedicine has been the certainty afforded by the randomised controlled trial study design – positivism's gold standard truth-seeking mechanism. Initially wielded most powerfully in the comparative testing of specific drugs and therapeutics (Carpenter, 1986), it has ultimately become much more widely used to compare competing service mechanisms, models and processes. Increasingly, globalised communication and centralisation of data sources since the 1990s have allowed hypothesis-testing iterations to speed up and multiply in many clinical knowledge domains. These same forces have influenced the rise in influence of the non-randomised experiment or cohort study. The enormous successes of the application of this design in coronary heart disease since the 1970s (Wilson et al., 1996) perhaps set the stage for its wide employment as a truth-seeker in relation to causal influences on mortality and morbidity in a host of clinical knowledge domains today. Positivism remains the primary philosophical driver of today's EBP movement.

While positivism drove great changes in material conditions in Western society, as a more complex and more stratified industrial, commercial and bureaucratic society developed, all kinds of new questions arose for intellectuals who sought to understand this social, rather than material world. Kant's (1781) 18th century critique of Descartes' idea of the certainty provided by the application of pure reason afforded a philosophical basis for numerous influential 19th and 20th century interpretive philosophers, all of whom sought to explain the social world in all of its non-measurable complexity. In the early 20th century, Husserl's phenomenology introduced a humanistic bent to the positivist movement in which he sought to elevate phenomenology to the same platform of certitude as claimed at the time by the physical sciences (Husserl, 1913). Heidigger's hermeneutic philosophy reintroduced the importance of relativism (its having first been introduced in Ancient Greek philosophy) and the notion that meaning does not reside stably, but is experienced or understood profoundly in relation to relative position.

The most recent and also the most EPD-relevant philosophical entrant to healthcare-related epistemology is post-structuralism, largely originated by the 1960s/70s post-Marxist, Foucault. Under post-structuralism, and Marx's structuralism before it, the social world is proposed to be understandable only with primary reference to politico-institutional power. Foucault traces the roots of enlightened egalitarian Western civilisation back to the 17th century, with the start of the historical moulding of a disordered human mass into an ordered dominated human mass by the exertion of state-based institutional control over individuals' time and over their bodies. From the 19th century, the rising dominance of bourgeoisie-based power (rather than state-based power) was expressed in democratic and egalitarian ideas and tones (Foucault, 1975). The same moulding of the mass that occurred in pre-democratic times is proposed as implicitly implemented in modern systems that are officially egalitarian, but which use various systems of micro-power or 'disciplines' to create non-egalitarian power relations (Hagell, 1989). The great 20th century tools of the advance of rational scientific medicine, observation and examination, are positioned in this theoretical world as fundamental structural tools of overriding institutional domination. In such a frame, hierarchical observation and normalising judgment are combined in the specific power-laden procedure, examination (Hagell, 1989).

Foucauldian thought has been widely applied in analyses of education, public policy, corrections and healthcare and has also informed the development of feminist theory and action. Nursing, until the 1970s conceived primarily as a caring and altruistic human art, has since the 1980s been frequently characterised in post-structuralist nursing literature as a 'docile' subject of the principal micro-power in the global context of healthcare, institutionally backed scientific medicine. A distinct train of thought in post-1990s nursing theory (Buchanan, 1999; Kushner and Morrow, 2003) has sought to assess the history and future mission of nursing through such a lens of domination.

A more action-oriented critical social theory has emerged in the 2000s as an influence on nursing theory. This school of applied post-structuralist thought emphasises progressive real-time change – 'emancipation' (Habermas, 1984). The key focus for the Habermasian intervention in healthcare is to create positive change in human communication. Communication styles and content dynamics are viewed as important learning and action tools. Critical social theory's call for emancipation post-dates Foucault's originating and more pessimistic call for 'resistance'. However, whether its call is for resistance or emancipation, postmodern nursing theory rests on a view that the profession lies structurally and epistemologically at the feet of medicine – its dominator and the professional face in healthcare of rational, technological and politico-legally enforced institutional power. Habermasian thought lies central to the base of today's EPD movement, which explicitly seeks to blend or merge technical, practical and critical knowledge in seeking to promote practice gains and improvements. EPD's attention to beginning practice and career progression (McCormack and McCance, 2006) exemplifies this approach, whereby participants track, reflect on and plan their professional progress via a framework that addresses knowledge and skill development via multiple paradigmatic frames.

Equally as relevant to EPD as post-structuralism is the philosophy of realism. This commonsense-influenced mode of thought, first well elucidated in modern times by Bhaskar (1978), is anti-positivist in that it posits the purpose of social science as to try to describe the subject of study (group, culture, process, organisation) in a way that makes sense to the stakeholding group(s) rather than seeking any absolute truth(s) (Wilson and McCormack, 2006). Where it differs from the earlier relativistic philosophical traditions discussed above, beginning with Kant's rejection of rational certainty, is that it is an 'operational' philosophy, concerned with context-specific knowledge building only – there is no universalistic drive to its mission or claims. The use of rational tools such as objective measurement is not excluded, but positivistic interpretation of such action is. A contemporary philosophy of critical realism (Bhaskar, 2009) developed from this source, linking Habermasian post-structuralism with its emphasis on communication, positive culture and critique of the dominant, with a realist, non-positivist epistemological standpoint. The principal critique of positivism as applied in the search for knowledge of the social world, as posed by today's critical realism, is that it ignores the problem

of context (in particular as it unfolds in any social/organisational change or development process) and assumes the existence of processes and communicative environments that are stable and able to be studied positivistically. Critical realism, or Habermasian-informed realism, is the philosophical cornerstone of today's EPD movement in nursing and midwifery.

Some of the distinctions made by the realist critique of positivism's assumption of the existence of a stable objective truth just waiting to be 'revealed' by a good study design and the use of probability-defined inferential statistical analysis, can perhaps be enlarged on by a consideration of a final philosophical movement that sparks widespread public policy-related interest today – that of neo-Aristotelianism. This is a reprise, not of Aristotle's contributions to material science, but of his optimistic ethical/political philosophy, concerned most of all with virtuous intent and with the promotion of 'eudamonia', the 'common good' or human flourishing (Habermas, 1993). Under neo-Aristotelian thought, 'phronesis' – a kind of ontological/practical wisdom-informed 'will to virtue' – may sit uneasily alongside an objective 'episteme' or body of built-up rational knowledge; without phronesis, episteme may be vulnerable to being harnessed negatively. A realist philosophical position may thus distrust positivism's episteme as the natural tool of a distant overlord unconcerned with localised growth, virtuous intent or indeed flourishing. Yet even the ancients realised that phronesis and episteme sit together and complement each other in human knowing.

Turning to method

The methods of knowledge generation that developed around the non-positivist philosophical bases all share inductive reasoning as a fundamental research design characteristic. Induction is obverse to positivism's deduction in that, rather than being tested, theories are arrived at following careful observation. The study of the social world required non-measurement-based approaches, and induction allowed for theory generation, which accounts for this complexity. Grounded theory rose in the 20th century as a sophisticated method of induction that emphasised a rule-bound environment for research inquiry, as compared with purely phenomenological inquiry methods in the study of social and organisational processes. Constructionism allowed for a focus on patients' and service users' lived experiences and linked well with Habermasian person-centred service improvement goals.

Social action research, first proposed by Lewin (1948), developed as a new change-orientated inductive method in the 1950s/60s in North America. This was and remains an amalgam of research inquiry and practical implementation of change (Kemmis and McTaggart, 1982). It pursues action (usually change or development) and research (or inquiry-based understanding) at the same time. In most of its forms, it does this by using a cyclic process that alternates between action and critical reflection. Inquiry methods and the change process remain uncemented and may alter as the spiral of action and reflection builds towards an agreed goal. As a rule, it is participative in nature – it usually requires a referent group made up of participants in the change process who inform and guide the ascending cycles of action, reflection and inquiry (Holter and Schwartz-Barcott, 1993). Action research's sphere is clearly the social and the practical. Its primary concern is to investigate how to get groups of people to act in ways that are of benefit both to them and the larger social body.

Realistic evaluation (Pawson and Tilley, 1997) arose from critical realism as a new style of action-oriented inductive method. Similar to action research, the method involves moving forward in time and studying group-and environment-related factors and changes as they happen, thus constructing meaning in real time, realistically, as it happens. The knowledge gained regarding meanings and potential cause-effect relationships is wielded to inform the continuation of the journey forward, and develop ever-improving practices and processes as this occurs. Differently to action research, it doesn't focus on agreed endpoints, as these may not be envisagable under realism, and calls for specific inductive data-collection processes that prize context, observer position and communication practice. Also differently to action research, which as a standalone method is atheoretical in nature (unless explicitly philosophically informed), it requires of the practitioner the employment of critical

(or Habermasian) theory as a primary pre-cognitive position. Much of the epistemology associated with EPD has been derived using realistic evaluation, though Habermas-informed action research has also been widely wielded.

Discussion

Hypothesis testing and the randomised controlled trial have throughout the course of the 20th century become embedded as the gold standard approach to knowledge building around clinical and intervention and service model choice. The attractiveness of the randomised controlled trial as an intervention-guider in healthcare remains significant today and despite the contemporary realist and critical realist critique, its appeal is growing not diminishing. Other established inductive inquiry methods commonly employed in healthcare to serve descriptive and hypothesis-generating goals , such as phenomenology, grounded theory and ethnography, do not take an obverse stance to positivism and nowadays are commonly employed alongside experimental and quasi-experimental studies in a variety of mixed method approaches. Developments to the 'Promoting Action on Research Implementation in Health Services' (PARIHS) framework afford a recent example of EPD-informed approaches to mixing context-specific inquiry and action with experimental trialling (Rycroft-Malone et al., 2013). Usually, the inductive aspects of mixed-method designs seek answers to 'why' questions that might accompany an overall cause-effect question being canvassed deductively. In this sense, many mixed-method inquiries could be considered as expressions of moderated positivism. Today in the healthcare research environment, certainty is not widely claimed, the invisibility of the researcher is not widely assumed and deduced findings are generally positioned carefully against induced qualifying factors.

Despite today's moderations, the enduring epistemological appeal of experimentation in healthcare remains, in organisational as well as clinical contexts. This relates to the great internal validity advantages afforded by randomisation or allocation to group, and longitudinal tracking in real time, followed by comparison on outcome by group, using well defined measurement protocols. The realist critique has undoubted merit, in that context may not be addressed in experimental study designs and that assumptions may be made as to the stability of the procedure or process under study. Central to this critique is the notion that the complexity of socially driven causation is bracketed out of any experiment around a complex intervention such as those likely to be studied by EPD practitioners (Pawson, 2013). Proponents of realist RCTs have recently argued that it is not the case that this critique nullifies the usefulness of experimentation as an evaluative tool in EPD, as socially driven causation can be accounted for in randomised experimental designs by employing multi-arm and factorial designs and by measuring context-relevant covariates, such as level of participation, and accounting for these in resultant analyses (Bonell et al., 2012).

EPD initiatives involve individuals, groups, workplace and organisational cultures and so may not be stable 'objects of study'. However, as well as its concern with culture, EPD ultimately seeks outcome, particularly for patients. Classically in EPD work, realistic evaluation is used to support the unfolding development of new cultures and processes that focus on the needs of individuals or promote person-centred care, which are forward directional to healthcare delivery and its outcomes (Pawson and Tilley, 1997). A cardinal process conducted early in the life of any EPD activity in nursing and midwifery is the group-based 'values clarification' exercise held among stakeholders (Manley et al., 2013). This process is innately informed by critical realist philosophy, as core values guiding the planned EPD work are canvassed and iteratively worked through and agreed on. Such an exercise suggests the ignition of an Aristotelian phronesis that aims to seek and find a virtuous thought construct around which optimistic action may productively grow naturalistically, taking account of (and pushing at the barricades of) any wider institutional power-related constraints at play. Such phronesis will surely yield novel ideas. These novel ideas may or may not yield the outcomes envisaged. Only prospective study can establish that. Prospective study under a purely realist model disavows the use of experimentation, and hence the opportunity of yielding deduced findings. Realist evaluation may well yield a finding as to what seemed to works best for whom and why, but only by introducing experimentation can the innovators place themselves in a position for their novel idea to be tested against variations of the idea and/

or control. To illustrate this point, a case study from the Australian healthcare environment, an EPD-informed care improvement initiative, the Essentials of Care Program (NSW Health, 2009) is presented as Figure 2. It may be that the evaluative component of this program could benefit from the addition of a positivist research approach to the already useful critical realist approach, which has employed multiple evaluative strategies of significant context-specific importance to driving ongoing localised project growth.

Figure 2: Case study: The Essentials of Care Program

In Australian nursing and midwifery, a centrally funded, statewide bedside care improvement program 'Essentials of Care' (EOC) (NSW Health, 2009), has received much attention and interest in recent years. This program targets improvement in ten key domains:
- Personal care
- Documentation
- Medication administration
- Clinical monitoring
- Privacy and dignity
- Self-care
- Risk prevention
- Clinical intervention
- Learning and development
- Organising care

EOC coordinators are employed in multiple health districts across the state, briefed with facilitating the development of EOC activity, usually in the form of local projects. The program is inspired by critical realist philosophy, and EPD principles explicitly guide the project development process, which is reported quarterly from the health districts to the central nursing and midwifery office. Newsletters describing project achievements are regularly disseminated at district- and statewide levels and an annual statewide one-day conference, showcasing EOC results has been held on multiple occasions.

Many EOC projects employ realistic evaluation, or other variants of an action research approach to evaluating project success. Localised pre- and post-intervention results against clinical indicators are sometimes reported. In-depth experimental or quasi-experimental evaluations are rare, as are theoretically informed qualitative explorations. Mixed methods are often employed in EOC evaluations, but research rigour (in design or measurement terms) is not prized as central to result generation. As a consequence of this, many inductive claims have been made for a multitude of local initiatives that have been progressed under the critical realist banner in NSW nursing and midwifery.

On the face of it, large numbers of EOC initiatives are sound and indeed locally successful. It seems likely that such success is mainly due to the enlightened use of critical realism-inspired facilitation of change and personal, professional and group-based growth. Growth begets growth, and this is often evident in the case reports of successful EOC projects. To date, however, we have no positivistic evidence in favour of the EOC program. This situation could be remedied. The localised nature of much EPD activity (that is, unit-level, context-specific work) makes it amenable to randomisation, using cluster-style designs (where each 'subject' is a work unit), with waitlist controls. Factorial trials around specific intervention domains (for example, approaches to improving medication administration) could also be pursued. Trials could be conducted within the different domains of the program.

Taken together, the 10 domains are extensive (traversing most of nursing's professional imperatives), and the amount of unit-level buy-in in New South Wales would likely supply the numbers needed for successful trialling. Agreed and standardised baseline and follow-up measures could be used in such trialling. Even if quantitative evaluative work did not incorporate randomisation, the imposition of standardised pre/post measurement would facilitate the generation of statewide quasi-experimental results by domain. Project inclusion/exclusion criteria in any such experiment or quasi-experiment, could be negotiated from the same central point as that driving standardised measurement and/or randomisation. Under such an approach, the present range of inductive claims for individual EOC-inspired practice improvement work could continue, but the addition of overriding positivistic study designs would vastly improve the capacity for EOC to generate health system-recognised evidence in regards to its durable impacts.

It remains the case that in any deductive study design, the choice of measures – in both dependent and independent contexts – is principal to the result obtained. It also remains the case that the selection of measures employed reflects only our conscious expectations of any studied intervention's possible effect. Such limitations are less relevant to the realist researcher, who may induce effects that were not consciously imagined or expected at the time the study began. Despite the inherent *a priori* limitations of experimentation, its success in iterating cures and successful treatment/management strategies in a host of clinical contexts throughout the 20th and early 21st century has ensured that it remains the dominant method of building healthcare epistemology. Understandably, this dominance persists when applied to complex interventions arising in organisational and public health contexts, despite the realist critique and the challenges implied by seeking absolutist truths in complex human environments.

Nurses and midwives are the most populous healthcare providers in today's system and also the providers with the broadest range of practice level. Anything from basic physical care and manual handling through to independent diagnostically informed clinical practice can come under the scope of nursing, as can multiple interpretations of pastoral, empathic and spiritual care. The history of nursing has unfolded in a unique way. Nurses have cared for the sick, sought ways to support the dying, assisted women with childbirth, took on medically discarded tasks, brought service at times of war and epidemics, sought a role and a space in which to work, insisted on policy changes to prevent infection and enabled hospital redesign, often prevailing against medical perceptions and views and the bourgeoisie's view with regard to a woman's place within ordered society. Nursing as a group, not some nurses as people, has never really been recognised for the contributions made in changing the landscape of healthcare. Much of this contribution has not been research-informed or driven since nursing lacked professional standing until the 1960s/70s and continues to fight to generate its own epistemology and have that epistemology accounted for in everyday 21st century practice (Fairbrother et al., 2014). Along the way, nursing's 'will to virtue' has remained intact. Unlike most branches of the health professional tree, the pursuit of pecuniary interest continues to be by and large shunned by a profession that implicitly values its own practical wisdom. With such a forward-leaning, tenacious history, such a critical mass (in sheer magnitude terms) and such an optimistic philosophical trajectory, fresh and novel ideas today surely abound in the profession. EPD's contribution of a socio-culturally informed 'right-thinking' frame within which phronesis can prosper is today significant, as the movement has grown not only in nursing, but also midwifery and the allied health professions, in Europe, Australia and North America in recent decades. EPD interventions based on critical realist philosophical positions can use positivist methodology, without being positivistically framed themselves. The randomised controlled trial is a transparent method that does not require that the intervention under study be positivistically positioned in philosophical terms (Bonell et al., 2013). The potential knowledge-building benefits that could accrue to nursing and midwifery under a harmonised convergence of science and critical realism are great, in the name of epistemological expansion and professional growth.

Among the group of critical realists, such as Marchal et al. (2013), who are vehemently anti-positivistic, the argument may continue to be raised that subjecting EPD interventions to experimentation would, due to environmental artificialities brought on by the deductive design constraints, damage or destroy the desired natural context for cultural growth that the EPD intervention is seeking to foster. Such pessimistic intellectual framing has been well rebutted on methodological grounds by experimentally minded realists (Bonell et al., 2013). Further, answering this essentially negatively framed question by theoretical means is clearly premature, as so few EPD interventions have been experimentally studied; no practical (or realistic) answer yet exists. EPD has always been framed by its progenitors as a melding of two key domains – personal emancipation (which has ontological as well as epistemological parameters) and clinical practice development (which has largely epistemological parameters). If this is so, then there appears to be no philosophical or methodological constraint at play. By using both philosophical lenses (critical theory and positivism) to explore and progress EPD-generated impacts

and outcomes, mainstreamed explanatory and cause-and-effect results could be obtained while staying true to the critical realist traditions of EPD program designers and evaluators. Along with this, it remains the case that the great philosophically informed qualitative research methodologies, such as phenomenology, ethnography and grounded theory do and should continue to contribute to knowledge generation efforts under the EPD banner. As noted earlier, these methods often contribute to moderated positivist research agendas; they also often drive important non-positivist research agendas in clinical domains where positivist work faces profound method-based challenges – for example in palliative care, where experimentation is often neither feasible nor ethical.

It is now hoped that as things move forward in earnest in a harmonised direction, that the birth of a new healthcare phenomenon may arrive – that of evidence-based EPD or EBEPD. Such a vision is illustrated in illustrated in Figure 3.

Figure 3: Evidence-based EPD
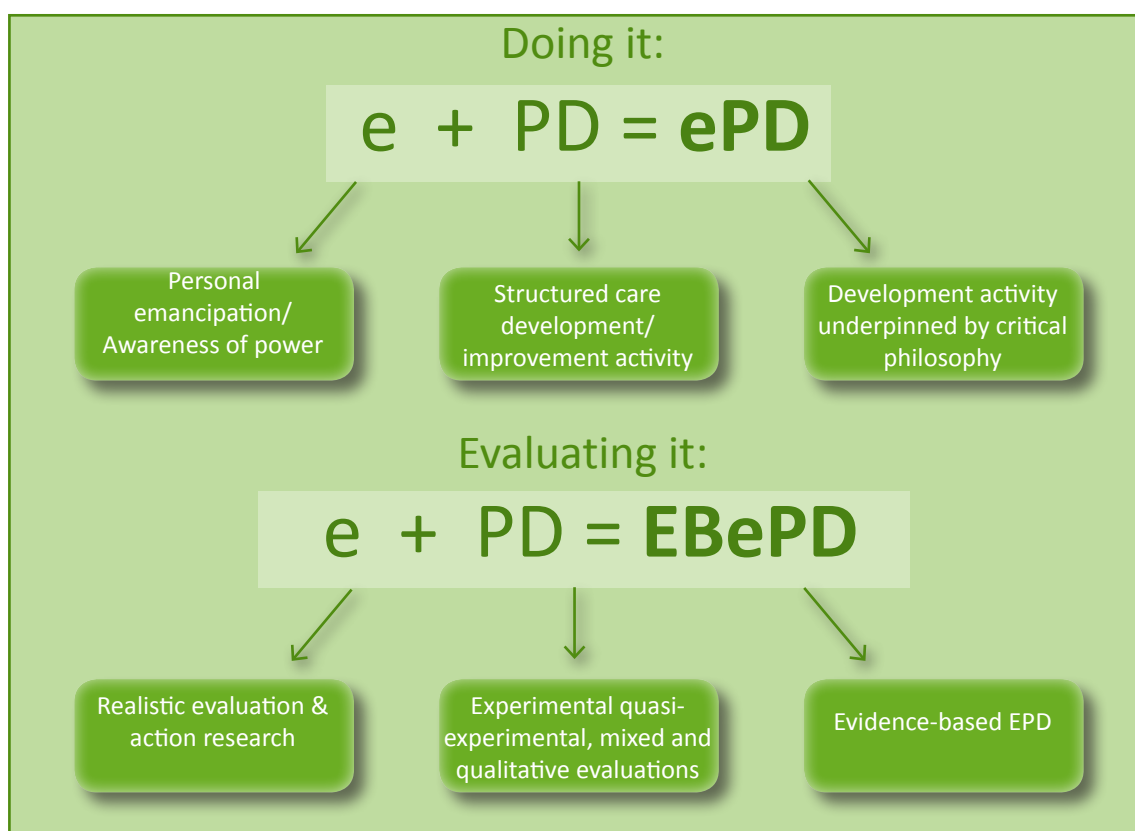
Reflective questions
- When should only context-specific approaches be used when planning evaluations of EPD interventions?
- When should generalisable approaches, such as experimentation, be used?
- When should/could both approaches be successfully blended?
- Using an example, consider what real and potential problems would be faced when blending realistic evaluation with experimental trialling? How could/should these be overcome?

References
Bhaskar, R. (1978) *A Realist Theory of Science* (2nd edition). Brighton: Harvester Press.
Bhaskar, R. (2009) *Scientific Realism and Human Emancipation* (1st published 1986). New York: Routledge.
Bonell, C., Fletcher, A., Morton, M., Lorenc, T. and Moore, L. (2012) Realist randomised controlled trials: a new approach to evaluating complex public health interventions. *Social Science and Medicine.* Vol. 75. No. 12. pp 2299-2306.

Bonell, C., Fletcher, A., Morton, M., Lorenc, T. and Moore, L. (2013) Methods don't make assumptions, researchers do: a response to Marchal et al. *Social Science and Medicine*. Vol. 94. pp 81-82.

Buchanan, T. (1999) Nightingalism: haunting nursing history. *Collegian: Journal of the Royal College of Nursing Australia.* Vol. 6. No. 2. pp 28-33.

Carpenter, K. (1986) *The History of Scurvy and Vitamin C.* Cambridge, UK: Cambridge University Press.

Descartes, R. (1644) *Principles of Philosophy*. Translated by V. Miller and R. Miller, 1991. Netherlands: Kluwer Academic.

Fairbrother, G., Cashin, A., Conway, R., Symes, A. and Graham, I. (2014) Evidence based nursing and midwifery practice in a regional Australian healthcare setting: behaviours, skills and barriers. *Collegian* (in press). Retrieved from: www.collegianjournal.com/article/S1322-7696(14)00093-6/abstract (Last accessed 20th April 2015).

Foucault, M. (1975) *Discipline and Punish: The Birth of the Prison*. New York: Random House.

Habermas, J. (1984) *The Philosophical Discourse of Modernity.* Cambridge: Polity.

Habermas, J. (1993) *Justification and Application. Remarks on Discourse Ethics*. Translated by C. Cronin, 1993. Massachusetts: Polity.

Hagell, E. (1989) Nursing knowledge: women's knowledge. A sociological perspective. *Journal of Advanced Nursing.* Vol. 14. No. 3. pp 226-233.

Heidegger, M. (1988) O*ntology – The Hermeneutics of Facticity.* Translated by J. van Buren, 1999. Bloomington: Indiana University Press.

Holter, I. and Schwartz-Barcott, D. (1993) Action research: what is it? How has it been used and how can it be used in nursing? *Journal of Advanced Nursing.* Vol. 18. No. 2. pp 298-304.

Husserl, E. (1913) *Ideas Pertaining to a Pure Phenomenology and to a Phenomenological Philosophy. First Book: General Introduction to a Pure Phenomenology*. Translated by F. Kersten, 1982. The Hague, Nijhoff.

Kant, I. (1781) *Critique of Pure Reason*. Translated by P. Guyer and A. Wood, 1998. Cambridge, UK: Cambridge University Press.

Kemmis, S. and McTaggart, R. (1982) *The Action Research Planner*. Victoria: Deakin University Press.

Kushner, K. and Morrow, R. (2003) Grounded theory, feminist theory, critical theory: toward theoretical triangulation. *Advances in Nursing Science.* Vol. 26. No. 1. pp 30-43.

Lewin, K. (1948) *Resolving Social Conflicts; Selected Papers on Group Dynamics.* Lewin, G. (Ed.) New York: Harper and Row.

Lubchenco, J. (1998) Entering the century of the environment: a new social contract for science. *Science.* Vol. 279. No. 5350. pp 491-497.

Manley, K., Titchen, A. and McCormack, B. (2013) What is practice development and what are the starting points? Chp 3 *in* McCormack, B., Manley, K. and Titchen, A. (Eds.) (2013) *Practice Development in Nursing and Healthcare.* (2nd edition). Oxford: Wiley-Blackwell. pp 45-65.

Marchal, B., Westhorp, G., Wong, G., Van Belle, S., Greenhalgh, T., Kegels, G. and Pawson, R. (2013) Realist RCTs of complex interventions – an oxymoron. *Social Science and Medicine.* Vol. 94. pp 124-128.

McCormack, B. and McCance, T. (2006) Development of a framework for person-centred nursing. *Journal of Advanced Nursing*. Vol. 56. No. 5. pp 472-479.

NSW Health (2009) *Essentials of Care: Working with Essentials of Care: A Resource Guide for Facilitators*. Sydney: New South Wales Department of Health.

Pawson, R. and Tilley, N. (1997) *Realistic Evaluation*. New York: Sage.

Pawson, R. (2013) *The Science of Evaluation: A Realist Manifesto*. New York: Sage.

Rafferty, A. (1996) *The Politics of Nursing Knowledge.* London: Routledge.

Rolfe, G. (1993) Closing the theory-practice gap: a model of nursing praxis. *Journal of Clinical Nursing.* Vol. 2. No. 3. pp 173-177.

Rycroft-Malone, J., Seers, K., Chandler, J., Hawkes, C., Crichton, N., Allen, C., Bullock, I. and Stunin, L. (2013) The role of evidence, context, and facilitation in an implementation trial: implications for the development of the PARIHS framework. *Implementation Science.* Vol. 8. No. 1. Retrieved from: www.ncbi.nlm.nih.gov/pmc/articles/PMC3636004/ (Last accessed 13th April 2015).

Sackett, D., Rosenberg, W., Gray, J., Haynes, R. and Richardson, W. (1996) Evidence based medicine: what it is and what it isn't. *British Medical Journal (Clinical Research Ed.).* Vol. 312. No. 7023. pp 71-72.

Watson, J. and Smith, M. (2002) Caring science and the science of unitary human beings: a trans-theoretical discourse for nursing knowledge development. *Journal of Advanced Nursing.* Vol. 37. No. 5. pp 452-461.

Wilson, P., D'Agostino, R., Levy, D., Belanger, A., Shilbersatz, H. and Kannel, W. (1996) Prediction of coronary heart disease using risk factor categories. *Circulation.* Vol. 97. No. 18. pp 1837-1847.

Wilson, V. and McCormack, B. (2006) Critical realism as emancipatory action: the case for realistic evaluation in practice development. *Nursing Philosophy*. Vol. 7. No. 1. pp 45-57.

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