NURSING THEORY AND CONCEPT DEVELOPMENT OR ANALYSIS

Getting evidence into practice: the meaning of 'context'

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Getting evidence into practice: the meaning of 'context'

Aim of paper. This paper presents the findings of a concept analysis of 'context' in relation to the successful implementation of evidence into practice.

Background. In 1998, a conceptual framework was developed that represented the interplay and interdependence of the many factors influencing the uptake of evidence into practice [Kitson A., Harvey G. & McCormack B. (1998) *Quality in Health Care* 7, 149]. One of the key elements of the framework was 'context', that is, the setting in which evidence is implemented. It was proposed that key factors in the context of health care practice had a significant impact on the implementation and uptake of evidence. As part of the on-going development and refinement of the framework, the elements within it have undergone a concept analysis in order to provide some theoretical and conceptual rigour to its content.

Methods. Morse's [Morse J.M. (1995) Advances in Nursing Science 17, 31; Morse J.M., Hupcey J.E. & Mitcham C. (1996) Scholarly Inquiry for Nursing Practice. An International Journal 10, 253] approach to concept analysis was used as a framework to review semi-nal texts critically and the supporting research literature in order to establish the conceptual clarity and maturity of 'context' in relation to its importance in the implementation of evidence-based practice.

Findings: Characteristics of the concept of context in terms of organizational culture, leadership and measurement are outlined. A main finding is that context specifically means 'the setting in which practice takes place', but that the term itself does little to reflect the complexity of the concept. Whilst the themes of culture and

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leadership are central characteristics of the concept, the theme of 'measurement' is better articulated through the broader term of 'evaluation'.

Conclusions. There is inconsistency in the use of the term and this has an impact on claims of its importance. The concept of context lacks clarity because of the many issues that impact on the way it is characterized. Additionally, there is limited understanding of the consequences of working with different contexts. Thus, the implications of using context as a variable in research studies exploring research implementation are as yet largely unknown. The concept of context is partially developed but in need of further delineation and comparison.

Keywords: context, culture, evidence-based practice, research implementation, concept analysis, PARIHS framework, evaluation, leadership

Background

In a previous study (Kitson et al. 1998), a conceptual framework was developed to represent the interplay and interdependence of the many factors that influence the uptake of evidence into practice. Drawing on evidence derived from previous practice development, quality improvement and research projects, the framework attempts to represent the complexity of the change process involved in implementing evidence-based practice as acknowledged by many authors [National Health Services (NHS) Centre for Reviews and Dissemination 1999; Lomas et al. 1991, Dawson 1997, Dopson et al. 1999, Ferlie et al. 1999, Grol & Grimshaw 1999]. Theoretical and retrospective analysis of a number of case studies of change led to the proposition that implementation is explained as a function of the relationship between evidence (research, clinical experience and patient preferences), context (culture, leadership and measurement) and facilitation (characteristics, role and style), with these elements having a dynamic, simultaneous relationship. Kitson et al. (1998) suggested that the most successful implementation occurs when evidence is robust, the context is receptive to change and where the change process is appropriately facilitated.

Whilst the framework appears to resonate with people's practical experience of developing and implementing new knowledge in practice, the elements of evidence, context and facilitation had not been subjected to a systematic analysis derived from literature. Thus, as part of an ongoing process of refinement and validation and in order to provide some theoretical rigour and conceptual clarity to the constituent elements of the framework, a concept analysis of the dimensions of evidence, context and facilitation has been undertaken to determine how each influences getting evidence into practice. This paper presents the findings of the concept analysis of *context*.

Introduction

Existing research in the field of research based decision-making, such as the Magnet Hospitals research (Aiken *et al.* 1998), the PACE project (Dunning *et al.* 1999) and the FACTS project (Eve *et al.* 1997), all make claims about the importance of context in evidence-based practice. Few of these studies, however, go beyond describing the importance of context and little attention is paid to delineating the interrelationship between the characteristics of the concept. This paper will, therefore, present a concept analysis of 'context', that is, the context of practice in which evidence is implemented. It will draw on seminal texts to identify the meaning, characteristics and consequences of practice contexts. Characteristics of the concept of context in terms of organizational culture, leadership and measurement will be outlined.

Concept analysis method

This inquiry was conducted using an approach to concept analysis developed by Morse (1995) and Morse *et al.* (1996). This method is particularly relevant to the concept analysis of context because it is more interpretive than the staged methods described by, for example, Walker and Avant (1995) and Rogers (1994) whose methods are located in a positivist conception of objective truth (Morse 1995) and have been criticised for de-contextualizing concepts (Morse 1995, Paley 1996). In contrast, Morse (1995) and Morse *et al.* (1996) present a process of inquiry that establishes the developmental stage or maturity of the concept(s):

...as revealed by their internal structure, use, representativeness, and/ or relations to other concepts (p. 255)

For these authors, concept analysis entails an assessment process using various techniques to explore the description of a concept in the literature or from observation/interview data, as opposed to the completion of specific stages described by other concept analysis authors (e.g. Walker & Avant 1995).

Morse *et al.* (1996, p. 256) suggest that ideally concepts in a discipline should be 'mature', meaning that a concept is relatively stable, clearly defined, with well-described characteristics, demarcated boundaries, specified preconditions and outcomes. In contrast, if a concept is 'immature' it will be poorly understood, poorly developed and poorly explained. The aim of concept analysis is to move the concept towards maturity. In terms of our work, the concept analysis is being undertaken by an examination of the literature. Therefore, the first stage in analysis is determining the concept's level of maturity. This paper presents the findings of an in-depth analysis of the concept of context by describing its meaning, exploring its key characteristics, and reviewing research that has attempted to explore the consequences of particular contexts for the uptake of evidence.

Search strategy

We adopted a two-stage approach to the concept analysis process. First, 'seminal texts' in the fields of quality improvement, change management and organizational effectiveness were reviewed. This was carried out, in order to return to original ideas rather than interpretations of ideas in published research. The texts chosen for review were ones that we were familiar with in our quality improvement, research utilization, practice development and organizational change work. The lead author read each text and presented short papers to the writing team outlining themes to do with 'context'. These themes were discussed and debated in terms of their relationship with the Kitson et al. (1998) model. Team members identified the need to explore how specific themes were used in contemporary research and development literature. These discussions highlighted areas that needed further exploration in stage two of the analysis.

In the second stage, the review included an analysis of a broad range of health care literature. It focused on the way 'context' was interpreted in health care literature and its considered importance in research implementation, development and quality improvement projects. Four databases were searched (Medline, Cinahl, Pyschlit and Sociofile) for papers published in English. Key words used were: context, culture, evaluation, leadership, quality improvement, quality assurance, change, change management, teamwork, systems and systems theory. The inclusion criterion for reviewed papers was that of 'an explicit consideration of context or one of its subelements in the study design/discussion'. The lead writer

reviewed chosen papers and presented key issues and themes to the writing team for discussion, challenge and debate.

The meaning of context

The context in which health care practice occurs can be seen on one level as infinite as it takes place in a variety of settings, communities and cultures that are all influenced by (for example) economic, social, political, fiscal, historical and psychosocial factors. In this paper, the term context is used to refer to the environment or setting in which people receive health care services, or in the context of getting research evidence into practice, 'the environment or setting in which the proposed change is to be implemented' (Kitson *et al.* 1998). In its most simplistic form, the term here means the physical environment in which practice takes place. Such an environment has boundaries and structures that together shape the environment for practice.

Characteristics of the concept of context

In general, the environment in which health care practices occur can be seen as that of Chin's (1985) 'multiple-clusters and multiple-systems environment'. Chin argues that components of an organization can be clustered in a variety of ways, from straightforward environments that are simple and plain with no clear salient features that represent the uniqueness of a particular environment, through to a turbulent environment where there are multiple clusters and multiple systems. Each has its own dynamic interaction with the environment as well as having multiple interactions with the total environment. Thus, the environment is seen as a collection of 'force-fields' that are constantly changing and never remain static. In the current United Kingdom (UK) health care system, emphasis is placed on information systems, knowledge and personal reflectivity, meaning that individual accountability for practice is paramount and that to achieve this practitioners are required to interact with complex systems. Such complexity has been illustrated in 'high profile' cases such as the Bristol Hospital Enquiry (Kennedy 2001) and in the research utilization/implementation literature, whereby complexity of interactions between practitioners and their practice settings means that there are 'no magic bullets' (Oxman 1994, Ferlie et al. 1998) for getting research into practice, or for making other kinds of evidence (for example, professional craft knowledge and patients' preferences) available for public verification/validation. Current approaches to continuous quality improvement, practice development, action research and learning organizations amplify this dynamic texture of environments and aim to address its complexity in bringing about changes in practice

(McCormack et al. 1999, Binnie & Titchen 1999). Indeed McCormack et al. (1999) argue that one of the greatest challenges to the development of health care practice is the contradiction between a 'market driven' health care environment and the espoused values of person-centred practice. Recent commentaries on the proposed plans to 'modernise' the UK NHS reinforce this contradiction (Enthoven 2000, Macintyre 2000, West 2000). Thus, it is essential that any description of context in studies makes explicit its focus either as a presentation of the complexity of factors that enable effective practice or the way in which organizational systems and structures interact with each other. The use of the term in the original framework (Kitson et al. 1998) is supported by much of the research utilization (Stetler 1994), implementation (Haines & Jones 1994), change management (Bennis et al. 1985), quality improvement (Kitson et al. 1994) and accountability literature (Bovens 1998). Through this concept analysis, the themes of culture, leadership and measurement can be used to capture the complexity of factors that enable effective practice and characterize the concept of context.

Culture

It has been argued that the dominant factor in clinical effectiveness, practice development and successful outcome achievement (for example) is that of *culture*. Manley (2000a), adopting Drennan's (1992) definition of culture as 'the way things are done around here', argues that it is the culture at individual, team and organizational levels that creates the context for practice. Kitson et al. (1998) suggest that context includes 'the forces at work which give the physical environment a character and feel', suggesting a direct relationship between context and culture. As Bate (1994) argues, cultures manifest themselves fundamentally through the values, beliefs and assumptions embedded in institutions and organizations. Bate describes an anthropological model of culture that is evident in the literature concerning learning organizations, change management, quality improvement and clinical excellence. This literature emphasizes the slippage between context and culture: 'Culture is not something that an organization has but something an organization is...It is a label or metaphor for, not a component of, the total work organization' (Bate 1994, p. 12). What this model suggests is that 'culture' is a paradigm - a way of thinking about or viewing an organization, comprising basic assumptions, values, artefacts and creations. Cultural change, then, is more successful when ways of thinking are fundamentally overhauled (Berwick 1989, Binnie & Titchen 1999).

Several diverse (and possible conflicting) cultures can operate within an organization or institution and different

cultural norms reflect implicitly different values or world-views (Kennedy 2001). Clashes of cultures within an organization often lead to dysfunctional or suboptimal working relationships. The work of Bate (1994) suggests that the way organizational culture is understood in the context of practice is essential to understanding how best to bring about changes in practice and cultural change (if that is needed). Equally, it can be argued that if we want to create changes in the context or environment in which people receive health care, then changing the prevailing culture may enable that to happen.

Senge's (1990) work on learning organizations argues that workers need to fulfil their potential and thus make a maximum contribution to the organization. The creation of a learning culture needs to pay attention to the needs of individuals (personal mastery and mental stimulation), group processes (having a shared vision) and organizational systems (systems thinking). While Senge places importance on the quality of the organizational systems in place, as described by both Juran (1988) and Deming (1991), of equal importance in Senge's work is the relationship between managers and workers. Organizations need to be open, have decentralized decision-making processes and imbue a management style that is facilitative rather than 'ordering'. Such a practice culture is espoused in current UK health care policy changes – lifelong learning, clinical governance, self-regulation, user involvement, clinical leadership and decentralization (Department of Health 1998, Donaldson & Muir-Gray 1998, Davies & Mannion 1999).

So what does this tell us about the relationship between context and culture? The literature suggests that a focus on systems, processes and structures in organizations may tell us about the context in which practice takes place, but it does little to articulate the culture of a practice setting. In any context, there may be multiple cultures, with each of these having their own distinct set of values, beliefs and assumptions. We argue that the culture of a practice context needs to be understood if meaningful and lasting change is to be achieved. The adoption of humanistic values of individual self-worth and potential for self-understanding means that attempts to change the culture of an organization need to view the staff resource as central to such a strategy.

Additionally the adoption of change processes that reduce contextual factors inhibiting self-fulfilment are recommended. It is further evident that valuing a learning organization makes explicit the value of facilitative leadership and the way that knowledge is generated and used in an organization. Nonaka (1991) argues that knowledge-generating organizations rely on the interaction between 'explicit knowledge' and 'tacit knowledge' to create innovation. Organizations need to be able to develop ways of translating

tacit knowledge into explicit knowledge without relying on traditional management procedures. Like Senge (1990) the emphasis is on leadership and the development of processes for continuous feedback on performance. Innovative organizations require full participation of workers, a stable workforce that can build trusting relationships, adequate technological support and interorganizational networking (Senge 1990). Figures 1 and 2 summarize the characteristics of context and culture as we have described them, by placing them along a continuum from 'weak' to 'strong'. In the original framework (Kitson *et al.* 1998) the end-points of the continuum were described as 'high' and 'low'. However, in isolating the single concept of 'context' these end points have been changed to 'weak' and 'strong' for the purposes of clarity.

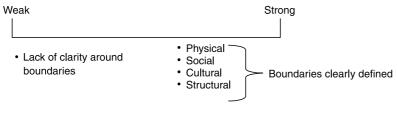
Leadership

For Kitson *et al.* (1998) leadership summarizes the nature of human relationships such that effective leadership gives rise

to clear roles, effective teamwork and effective organizational structures. Implicitly in the framework the idea of 'all practitioners being a leader of something' was central to its construction and is consistent with Senge's (1990) emphasis on the inclusion of all workers at every level of the organization to ensure commitment and dynamism. Furthermore, Senge (1990) suggests that workers are more likely to participate in an organization when they feel valued and have a choice. This suggests that there is a relationship between the leader and the culture of the environment that needs to be made explicit. However, none of this work addresses the relationship between the leader and organization in terms of 'cause and effect', i.e. does the organizational culture dictate a particular leadership style or is it the leadership style that creates an organizational culture?

In modern health care much emphasis is placed on 'transformational leadership' (Mintzberg 1975, McClure et al. 1983). Transformational leaders create a culture that recognizes everybody as a leader of something. They inspire

Context



- Lack of appropriateness and transparency
- · Lack of power and authority
- · Lack of resources
- Lack of information and feedback
- Not receptive to change
- Appropriate and transparent decision making processes
- · Power and authority understood
- · Appropriate resources
- Information and feedback systems in place
- · Receptiveness to change

Figure 1 Characteristics of context.

Culture



- Unclear values and beliefs
- Low regard for individuals
- Task driven organization
- Lack of consistency
- Able to define culture(s) in terms of prevailing values/ beliefs
- · Values individual staff and clients
- Promotes learning organization
- Consistency of individuals role/experience to value:
 - -Relationship with others
 - -Teamwork
 - Power & authority
 - Rewards/recognition

Figure 2 Characteristics of culture.



- Traditional, command and control
 Transformational leadership leadership
- · Lack of role clarity
- · Lack of teamwork
- · Poor organizational structures
- · Autocratic decision making processes
- · Didactic approaches to teaching/ learning/managing
- Role clarity
- · Effective teamwork
- · Effective organizational structures
- · Democratic inclusive decision making processes
- Enabling/empowering approach to teaching/learning/managing

Figure 3 Characteristics of leadership.

staff towards a shared vision of some future state, as well as a number of other processes such as challenging and stimulating, enabling, developing trust and communicating (McClure 1983, Schein 1985). Transformational leaders require emotional intelligence, rationality, motivational skills, empathy and inspirational qualities and the intellectual qualities of strategic sensing, analytical skills and self-confidence in public presentation (Mintzberg 1975). Schein (1985) suggests that transformational leaders can transpose their individual beliefs and values into collective beliefs and values and that these eventually become assumptions because they are seen to work reliably and then become taken for granted. Thus, it is implied that the transformational leader can alter the prevailing organizational culture and create a context that is more conducive to the integration of evidence and practice. Transformational leaders can bring the 'science' component of health care practice (the application of science and technology) together with the 'art' component (the translation of different forms of practice knowledge) into caring actions. This integration creates an environment where a shared understanding of knowledge for practice exists within a clearly articulated set of organizational values and beliefs (Kramer & Hafner 1989). Making explicit such values enables a framework for measurement to be created that reflects both existing and intended practice cultures. Figure 3 summarizes the relationship between leadership aspects of culture and context which affect getting evidence into practice.

Measurement

There is a dominant theme in health care of the need to measure effectiveness. This is a theme that is explicit in the work of both Juran (1988) and Deming (1991) and has continued to be articulated through medical audit, clinical audit, standard setting, quality improvement programmes, care pathway monitoring and accreditation. The relationship between measurement of effectiveness and quality of care is widely debated in the literature (for example, Donabedian 1988). Juran (1988) argues that measurement systems need to be clearly defined and articulated 'in numbers' through instrumentation. However, both Deming (1991) and Donabedian (1988) argue that measurement is more complex than this and illustrate this through the many ways that medical quality can be defined, depending on the particular perspective adopted (doctor, service user, administrator, etc.). Whilst the 'hard' data of cost-effectiveness and resource management provide a particular perspective on the effectiveness of practice, a humanistic (person-centred) culture of practice makes explicit the value of individual perceptions and feedback. In an anthropological culture the importance of giving and receiving feedback is held to be central to team working (Bate 1994) and in such a culture both the 'hard' outcome data that can inform the effectiveness of particular interventions and the 'soft' data of user experiences are equally valid. In such a culture, staff use evidence gathered through a variety of sources to make decisions about individual and organizational effectiveness, which is then used as an integral part of accountability frameworks and staff appraisal strategies. This culture embraces peer-review, user-led feedback and reflection on practice, as well as evidence derived from systematic reviews, meta-analysis and audit of effectiveness.

The relationship between context and measurement must be seen as a two-way process, as the culture of the organization influences the type of measurement tools and methods of reporting used. So too does the type of measurement influence the response of the organization to the information presented. Measurement is a complex but necessary component of the environment that seeks to implement evidence into practice. Measurement is both part of the research process that generates evidence on which to base practice and part of the evaluation or feedback process that demonstrates whether or not changes to practices are appropriate/effective/efficient. However, what is also

increasingly evident in current health care reforms is that reliance on 'hard' outcome measures and resource management data alone only provides one view of effectiveness or, as has been described by Nolan and Grant (1993), 'evaluation with one eye closed'. This suggests that there is a need to incorporate a variety of evidence to measure effectiveness and that the term 'measurement' itself perpetuates a 'scientific' notion of measurement rather than an eclectic multimethod approach. For this reason, it may be more appropriate to consider the importance of evaluation in this framework as opposed to measurement. Authors such as Guba and Lincoln (1989), Pawson and Tilley (1997) and Quinn-Patton (1997) argue that evaluation frameworks need to reflect the complexity of organizational systems and the multiple realities of stakeholders. The current emphasis on the importance of user feedback (Plamping et al. 2000), practice narratives (Greenhalgh & Hurwitz 1998) and practitioners' reflections (Heath & Freshwater 2000) as integral components of an evaluative framework of effectiveness illustrates the need to consider theories of evaluation rather than the dominant focus on 'hard' outcome data alone. Figure 4 highlights the characteristics of evaluation that need to be an explicit part of a 'strong' practice culture and an approach to evaluation that can be seen as 'weak'.

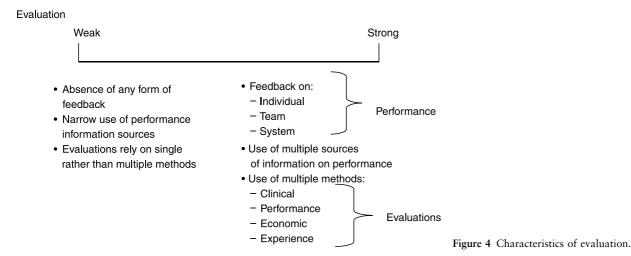
Context and its consequences

Increasingly it is recognized that the context in which practice occurs has an impact on user, professional and organizational outcomes. However, Manley (2000b) argues in a review of the literature on organizational culture, that thus far research has tended to focus on the relationships

between systems and structures rather than exploring the consequences of dynamic relationships that are culturally bound. Like Manley, others recognize the need for an understanding of practice cultures that goes beyond understanding organizational systems (Safford 1988, Denison 1990, Kotter & Heskett 1992, Altieri & Elgin 1994) as a simplistic model of the relationship between organizational culture and outcomes.

In health care, little research has been undertaken to explore the impact of the context of the practice environment on practice outcomes. Much of the research so far has focused on organizational culture and mapping the dimensions of different cultures. As yet, little of this research has explored the impact of the context of practice with its cultures and subcultures on the quality of care and user outcomes. However, some attempts have been made to capture the issue of context and its importance in user outcomes and research utilization.

The most recent systematic study of context and its underpinning cultures is that of the Magnet Hospitals research (Aiken *et al.* 1998, Aiken & Sloane 1997). Magnet hospitals, so-called because of their ability to retain staff, have been associated with certain organizational attributes in nursing that have in turn been positively linked with staff outcomes (McClure *et al.* 1983, Kramer & Hafner 1989, Aiken & Sloane 1997) and performance as indicated by lower mortality rates (Aiken *et al.* 1998, Mitchell & Shortell 1997). Aiken *et al.* (1994) suggest that hospitals that enable professional autonomy, control over practice and positive relationships between nurses and physicians will be ones in which nurses are able consistently to exercise professional judgement with positive results on the quality and outcomes of patient care.



The Promoting Action on Clinical Effectiveness project (PACE) based at the King's Fund, London, focused on the implementation of evidence about 16 different clinical topics. Evaluation of the outcomes of these implementation projects (Dopson et al. 1999, Dunning et al. 1999) highlights the importance of understanding the local context for implementation, the identification of local clinical leaders, the need to understand 'culture' as a potential barrier to change and the adoption of a corporate approach to clinical effectiveness. Good team working was considered the critical element in the success of all 16 projects. Overall the evidence suggests that 'strong evidence' (in the evaluators' terms this means, for example, evidence-based clinical guidelines), supportive opinion leaders and integrating projects within a committed organization appeared to be primary drivers for successful implementation projects.

A further example is the Framework for Appropriate Care Throughout Sheffield project (FACTS) in the UK. This focused on the implementation of a variety of evidence to create a reproducible, cost-effective quality controlled framework for changing clinical behaviour across one district (Eve et al. 1997). Evaluation of this initiative drew the conclusions that different organizational cultures need to be carefully negotiated and made explicit, and that agents of change need to be able to navigate between cultures. Additionally, Hodgkin et al. (1996) emphasize the need for all implementation programmes to be tailored to local contexts. Similar conclusions were drawn from the Getting Research into Practice and Purchasing (GRIPP) project, which identified that implementation programmes need to understand the importance of context because, even where the evidence is strong, other factors (such as pressure from particular stakeholders) impact on the uptake of evidence (Dopson et al. 1994). However, it has to be acknowledged that none of these studies defined the relationship between the concepts they were using, that is, culture, context, leadership, organization.

Conclusions

Being transparent about the meanings of the concepts we use is important before we can make claims about their importance in activities such as research evidence implementation. What is clear from the studies reviewed that have included a consideration of context is that there is inconsistency in the use of the term and that this has an impact on claims of its importance. Thus the implications of using context as a variable in research studies exploring research implementation are as yet largely unknown. This paper has reviewed a variety of literature that may help us to understand the

concept of 'context' more fully. The concept itself lacks clarity, because of the many issues that impact on the way it is characterized. According to the criteria developed by Morse (1995) and Morse *et al.* (1996), the concept is partially developed but in need of delineation and comparison.

Earlier in this paper, we posed the question of whether context is a sufficient concept to capture the complexity of health care environments. The analysis of the characteristics and consequences of context suggests that other characteristics are equally important (for example, systems of decision-making, staff relationships, organizational systems, power differentials and the potential of the organization to innovate) and that these subelements need to be taken into account in any articulation of the concept of context. Therefore, in the original framework developed by Kitson et al. (1998) where context is identified as one of the three overarching concepts that are important to research evidence implementation, it may equally be too soon to make such a claim, prior to further testing and development of the framework. Placing differing contexts along a continuum of weak/strong may be one useful approach to understanding its importance in research implementation studies, as there is some evidence that the elements within context coalesce to enable change or to act as barriers to research implementation (see Table 1 for a summary of the characteristics of context as outlined in this paper).

Clearly, the relationship between context and culture is complex. However, an understanding of context as the specific environment in which implementation, utilization and creation of evidence may take place makes it easier to understand culture as a characteristic of context and one that shapes the dynamic and changing nature of practice. The framework developed by Kitson *et al.* (1998) has endeavoured to capture this dynamic relationship and places culture as a central focus in considering the way the context of practice needs to be understood and challenged in implementation programmes. Whilst resources are important to research uptake (Funk *et al.* 1991), it is also important that resources are not focused upon at the expense of deeper issues such as relationships, cultures and ways of working.

If such issues as relationships are to be captured, then a more eclectic and inclusive approach to the evaluation of practices needs to be developed. Therefore, we recommend that the element termed 'measurement' in the original (Kitson *et al.* 1998) framework be changed to evaluation, reflecting the multiple approaches to evaluating effectiveness and the range of methodologies available for doing this.

Table 1 Characteristics of context

Element	Sub-element	Indicators	
		Weak	Strong
Context		Lack of clarity around boundaries	Physical Social Cultural Structural Cultural
		Lack of appropriateness and transparency Lack of power and authority Lack of resources Lack of information and feedback Not receptive to change	Appropriate and transparent decision making processes Power and authority understood Appropriate resources Information and feedback systems in place Receptiveness to change
	Culture	Unclear values and beliefs Low regard for individuals Task driven organization Lack of consistency	Able to define culture(s) in terms of prevailing values/beliefs Values individual staff and clients Promotes leaning organization Consistency of individuals role/ experience to value: - relationship with others - teamwork - power and authority - rewards/recognition
	Leadership	Traditional, command and control leadership Lack of role clarity Lack of teamwork Poor organizational structures Autocratic decision making processes Didactic approaches to learning/teaching/ managing	Transformational leadership Role clarity Effective teamwork Effective organizational structures Democratic inclusive decision making processes Enabling/empowering approach to teaching/ learning/managing
	Evaluation	Absence of any form of feedback Narrow use of performance information sources Evaluations rely on single rather than multiple methods	Feedback on: - individual - team - system Use of multiple sources of information on performance Use of multiple methods: - clinical - performance - economic - experience Feedback on: Performance Evaluations

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References

Aiken L.H. & Sloane D.M. (1997) Effects of organizational innovations in AIDS care on burnout among urban hospital nurses. Work and Organizations 24, 453–477.

Aiken L.H., Sloane D.M. & Sochalski J. (1998) Hospital organisation and outcomes. *Quality in Health Care* 7, 222–226.

Aiken L.H., Smith H.L. & Lake E.T. (1994) Lower medicare mortality among a set of hospitals known for good nursing care. *Medical Care* 32, 771–787.

Altieri L.B. & Elgin P.A. (1994) A decade of nursing leadership research, *Holistic Nursing Practice* 9, 75–82.

Bate P. (1994) Strategies for Cultural Change. Butterworth Heinemann, Oxford.

Bennis W.G., Benne K.D. & Chin R. (1985) *The Planning of Change*, 4th edn. Holt, Rinehart & Winston, New York.

Berwick D.M. (1989) Continuous improvement as an ideal in health care. *New England Journal of Medicine* **320**, 53–56.

Binnie A. & Titchen A. (1999) Freedom to Practice: The Development of Patient-Centred Nursing (Lathlean J. eds). Butterworth Heinemann, Oxford.

- Bovens B. (1998) The Quest for Responsibility: Accountability and Citizenship in Complex Organisations. Cambridge University Press, Cambridge.
- Chin R. (1985) The utility of models of the environments of systems for practitioners. In *The Planning of Change*, 4th edn. (Bennis WG, Benne KD & Chin R eds) Holt, Rinehart & Winston, New York.
- Davies H.T.O. & Mannion R. (1999) Clinical governance: striking a balance between checking and trusting. In *Reforming Markets in Health Care: an Economic Perspective* (Smith P.C. ed.). Open University Press, Milton Keynes.
- Dawson S. (1997) Inhabiting different worlds: how can research relate to practice? *Quality in Health Care* 6, 177–178.
- Deming W.E. (1991) Out of Crisis. Cambridge University Press, Cambridge.
- Denison D. (1990) Corporate Culture and Organizational Effectiveness. John Wiley, New York.
- Department of Health (1998) A First Class Service quality in the new NHS. The Stationery Office, London.
- Donabedian A. (1988) The quality of care: how can it be assessed? *Journal of the American Medical Association* **260**, 1743–1748.
- Donaldson L.J. & Muir-Gray J.A. (1998) Clinical governance: a quality duty for health organisations. Quality in Health Care 7 (Suppl.), 37–44.
- Dopson S., Gabbay J., Locock L. & Chambers D. (1999) Evaluation of the PACE Programme: final report. Oxford Healthcare Management Institute. Templeton. College University of Oxford and Wessex Institute for Health Research and Development, University of Southampton, Southampton.
- Dopson S., Mant J. & Hicks N. (1994) Getting research into practice: facing the issues. *Journal of Management in Medicine* 8, 4–12.
- Drennan D. (1992) Transforming Company Culture. McGraw-Hill, London.
- Dunning M., Abi-Aad G., Gilbert D., Hutton H. & Brown C. (1999) Experience, Evidence and Everyday Practice. Creating Systems for Delivering Effective Health Care, Kings Fund, London.
- Enthoven A.C. (2000) Modernising the NHS: a promising start, but fundamental reform is needed. *British Medical Journal* 320, 1329– 1331.
- Eve R., Golton I. & Hodgkin P. (1997) Learning from Facts. Lessons from the Framework for Appropriate Care Throughout Sheffield (FACTS) Project SCHARR Occasional paper no. 97/3. University of Sheffield, Sheffield.
- Ferlie E., Barton D.E.S. & Highton D. (1998) Assuring high quality and evidence-based health care: a case study from HIV/AIDS services. *Quality in Health Care* 7 (Suppl.), 524–529.
- Ferlie E., Wood M. & Fitzgerald L. (1999) Some limits to evidencebased medicine: a case study from elective orthopaedics. *Quality in Health Care* 8, 99–107.
- Funk S.G., Champagne M.T. & Wiese R.A. (1991) Barriers to using research findings in practice: the Clinician's perspective. *Applied Nursing Research* 4, 90–95.
- Greenhalgh T. & Hurwitz B. (1998) Narrative Based Medicine Dialogue and Discourse in Clinical Practice. British Medical Association, London.
- Grol R. & Grimshaw J. (1999) Evidence-based implementation of evidence-based medicine. *Joint Commission Journal on Quality Improvement* 25, 503–513.

- Guba E.G. & Lincoln Y.G. (1989) Fourth Generation Evaluation. Sage, Beverly Hills.
- Haines A. & Jones R. (1994) Implementing findings of research. British Medical Journal 308, 1488–1492.
- Heath H. & Freshwater D. (2000) Clinical supervision as an emancipatory process: avoiding inappropriate intent. *Journal of Advanced Nursing* 32, 1298–1306.
- Hodgkin P., Eve R. & Golton I. (1996) Changing clinical behaviour on a city wide scale: lessons from FACTS. *Journal of Clinical Effectiveness* 1, 8–9.
- Juran J.M. (1988) Juran on Planning for Quality. The Free Press, New York.
- Kennedy I. (2001) Learning from Bristol: the report of the public inquiry into children's heart surgery at the Bristol Royal Infirmary 1984–1995. CM 5207(1). The Stationery Office, London.
- Kitson A.L., Harvey G. & Hyndman S. (1994) The Impact of a Nursing Quality Assurance Approach, the Dynamic Standard Setting System (DySSSy), on Nursing Practice and Patient Outcomes. The ODySSSy Project. Report no. 4, Vol. I–III. National Institute for Nursing, Oxford.
- Kitson A., Harvey G. & McCormack B. (1998) Approaches to implementing research in practice. Quality in Health Care 7, 149– 159.
- Kotter J.P. & Heskett J.L. (1992) Corporate Culture and Performance. The Free Press, New York.
- Kramer M. & Hafner L. (1989) Shared values: impact on staff nurse job satisfaction and perceived productivity. *Nursing Research* 38, 172–177.
- Lomas J., Enkin M., Anderson G.M., Hannah W.J., Vayda E. & Singer J. (1991) Opinion leaders versus audit and feedback to implement practice guidelines. *Journal of the American Medical Association* 265, 2202–2207.
- Macintyre S. (2000) Prevention and the reduction of health inequalities. *British Medical Journal* 320, 1399–1400.
- Manley K. (2000a) Organisational culture and consultant nurse outcomes: Part 1 organisational culture. *Nursing Standard* 14, 34–38.
- Manley K. (2000b) Organisational culture and consultant nurse outcomes: Part 2, nurse outcomes. *Nursing Standard* 14, 34–38.
- McClure M., Poulin M., Sovie M. & Wandelt M. (1983) Magnet Hospitals: Attraction and Retention of Professional Nurses. American Academy of Nursing. Taskforce on Nursing Practice in Hospitals, Kansas City.
- McCormack B., Manley K., Titchen A., Kitson A. & Harvey G. (1999) Towards practice development: a vision in reality or a reality without vision. *Journal of Nursing Management* 7, 255–264.
- Mintzberg H. (1975) The manager's job: folklore and fact, *Harvard Business Review* July-August, 49–61.
- Mitchell P. & Shortell S. (1997) Adverse outcomes and variations in the organisation of care delivery. *Medical Care* 35 (Suppl.), NS19– NS32.
- Morse J.M. (1995) Exploring the theoretical basis of nursing using advanced techniques of concept analysis. *Advances in Nursing Science* 17, 31–46.
- Morse J.M., Hupcey J.E. & Mitcham C. (1996) Concept analysis in nursing research: a critical appraisal. Scholarly Inquiry for Nursing Practice. An International Journal 10, 253–277.

- National Health Service (NHS) Centre for Reviews and Dissemination (1999) Effective Health Care: Getting Evidence Into Practice. The University of York/NHS Centre for Reviews and Dissemination, The Royal Society of Medicine Press Limited, London.
- Nolan M. & Grant G. (1993) Service evaluation: time to open both eyes. *Journal of Advanced Nursing* 18, 1434–1442.
- Nonaka I. (1991) The knowledge-creating company. *Harvard Business Review* Nov–Dec, 96–104.
- Oxman A. (1994) No Magic Bullets A Systematic Review of 102 Trials of Interventions to Help Health Care Professional Deliver Services More Effectively or Efficiently. North East Thames Regional Health Authority, London.
- Paley J. (1996) How not to justify concepts in nursing. *Journal of Advanced Nursing* 24, 572–578.
- Pawson R. & Tilley N. (1997) Realistic Evaluation. Sage, London. Plamping D., Gordon G. & Pratt J. (2000) Practical partnerships for health and local authorities. British Medical Journal 320, 723– 1725.

- Quinn-Patton M. (1997) Utilization-Focused Evaluation: The New Century Text, 3rd edn. Sage, California.
- Rogers B.L. (1994) Concepts, analysis and the development of nursing knowledge: the evolutionary cycle. In *Models, Theories and Concepts* (Smith J. ed.), Blackwell Science, Oxford.
- Safford G.S. (1988) Culture traits, strengths and organizational performance: moving beyond 'Strong Culture'. *Academy of Management Review* 13, 546–558.
- Schein E.H. (1985) Organizational Culture and Leadership. Jossey Bass, San Francisco, CA.
- Senge P.M. (1990) The Fifth Discipline: The Art and Practice of the Learning Organisation. Doubleday/Currency, New York.
- Stetler C. (1994) Refinement of the Stetler/Marram model for application of research findings to practice. *Nursing Outlook* **42**, 15–25.
- Walker L.O. & Avant K.C. (1995) Strategies for Theory Construction in Nursing. Appleton & Lange, New Jersey.
- West E. (2000) Organisational sources of safety and danger: sociological contributions to the study of adverse events. *Quality in Health Care* 9, 120–126.