Improving practice : child protection as a systems approach

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Title:

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Abstract:

This paper argues for treating the task of improving the child protection services as a systems problem, and for adopting the system-focused approach to investigating errors that has been developed in areas of medicine and engineering where safety is a high priority. It outlines how this approach differs from the traditional way of examining errors and how it leads to different types of solutions. Traditional inquiries tend to stop once human error has been found whereas a systems approach treats human error as the starting point and examines the whole context in which the operator was working to see how this impacted on their ability to perform well. The article outlines some factors that seem particularly problematic and worthy of closer analysis in current child protection services. A better understanding of the factors that are adversely effecting practitioners' level of performance offers the potential for identifying more effective solutions. These typically take the form of modifying the tasks so that they make more realistic and feasible demands on human cognitive and emotional abilities.

Text:

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that has been developed in areas of medicine and engineering where safety is a high priority. At first glance, the engineering problems of nuclear power plants and aviation might seem remote from concerns about children's safety and well being but anyone from child protective services would find their discussions and worries surprisingly familiar. They too are concerned with avoiding disasters that result in death or injury to humans. They too have experienced a series of well-publicised inquiries into their mistakes. And the resemblance to child protection work continues into the findings of those inquiries: disasters are more often judged to be caused by people than being due to faulty equipment or organizational factors. Human error was identified as the culprit in 70-75% of accidents in anasaethesia (Cooper, Newbower et al. 1984; Wright, Mackenzie et al. 1991), and in over 70% of plane crashes (Organization 1993). This is remarkably similar to my own finding from studying inquiries into child abuse deaths in the UK: 75% concluded that professional errors made a significant contribution to the failure to see the risk to the child and to take steps to protect him or her (Munro 1999).

Child protection also resembles an engineering problem because efforts to improve practice have increasingly taken the form of providing tools for front line workers. Assessment frameworks, procedure manuals, decision making instruments are all, like power drills and computers, designed to enhance workers' performance, by augmenting or replacing the skills and knowledge in their heads. The proliferation of such tools has transformed the work experience for practitioners (and for families) but, as many disciplines have found to their cost, tools do not always have the intended effect. How they are used in practice and how they interact with other factors cannot be predicted in advance but needs to be studied.

The systems approach was developed in engineering because traditional solutions were not working as well as expected. Mistakes still kept being made, sometimes with disastrous consequences. Power plants got close to meltdown and planes crashed into mountains. The standard solutions of providing more tools, more detailed manuals, and closer management scrutiny were not eradicating human error. Indeed, in some cases, it seemed that they were increasing the scope for error. To deal with this puzzling outcome, engineers radically reframed the way they were looking at the problem. Instead of regarding human error as a satisfactory explanation of an accident and therefore concluding the investigation at that point, they treated it as the *start* of inquiry: why did the front line worker misread the dial, omit crucial steps in the procedures, or overlook signs of trouble? This led them to investigate the total system within which the person was operating so that they could better understand why the faulty action had looked the sensible thing to do at the time or why it might have been difficult for humans to perform well.

The systems approach led to new types of solution. Basically, they take the form of redesigning the tasks expected of workers so that they are better tailored to the skills of human beings. Mobile phones provide a simple example of faulty design. People often have trouble remembering their mobile phone number and make mistakes when asked to quote it; human errors are common. But mobile phone numbers provide a good example of a predictable error because their design is poorly suited for use by human beings. They are typically a list of eleven random numbers and are presented in one block on

caller display. However, the human short term memory can handle 7 items (plus or minus two) (Simon 1990). It is therefore not surprising that people have difficulty in dealing with eleven digits. People who master the art of remembering their own number generally do so by dividing it into three sub-groups (each less than 7 numbers long) and remembering each sub-group individually.

This article will illustrate how child protection services have followed the traditional approach of engineering in investigating errors and looking for ways to improve practice. It will also argue that, like engineering, the improvements are not working as well as hoped. The case for switching to a systems approach will be made, offering a sketch of how such an investigation would differ from the traditional and the new areas of questioning to which it draws attention.

My experience is of the UK child protection system and so this provides most of the examples I use, but it presents similar problems to the American system (indeed, it draws extensively on the US system for ideas so its similarity is not surprising).

Traditional investigations

The history of child welfare is littered with tragic stories of children suffering prolonged abuse and then being killed by a parent. The stories are all the more shocking because these children were known to professionals whose duty it was to help and protect them. In some cases, as in the New Jersey foster care scandal, the children had been 'rescued' from their families only to be abused by their foster carers without their social workers recognising the danger they were in (DePanfilis 2003). The public, quite understandably,

demand an explanation of how the services failed these children and an assurance that steps will be taken to prevent further cases. The standard response is to hold an inquiry, looking in detail at the case and trying to get a picture of the causal sequence of events that ended in the child's death or serious injury. Unlike the police investigation, which focuses on the perpetrators of the homicide, these inquiries focus primarily on how the professionals acted, judging them against the formal procedures for working with families and principles of good practice.

In exploring why an incident happened, there is no objective point at which we can say 'this is *the* cause'. We are tracing a chain of events back in time to understand how it happened. Numerous factors are involved and, with any factor we see as causally important, it is possible to ask why it occurred and so continue tracing events further and further back in time. In practice, some 'stop rules' are needed for deciding when an explanation is sufficient and ending the investigation.

Rasmussen studied many different types of investigations and identified three main reasons for stopping (Rasmussen 1990). Firstly, there are times when the search helps to devise a solution that will prevent a recurrence, and so further inquiry is unnecessary. Secondly, there are practical constraints that make it unfeasible to dig any deeper; time, cost and the cooperativeness of the people involved place limits on how detailed a study can be made. With inquiries into child abuse deaths, the terms of reference for the inquiry team put some boundaries on the type of search they are expected to make.

Thirdly, and most commonly, the questioning stops when a familiar, abnormal event is found that provides a satisfactory explanation

In child protection inquiries, as in the inquiries held in medical and engineering disasters, these familiar events that bring the investigation to a halt usually take the form of human error. Practitioners did not comply with procedures, or lapsed from accepted standards of good practice. There is a brief exception to this in child protection in that the inquiries in the early 1970s tended to identify systemic as well as individual failings. At this period, child abuse had become more widely acknowledged and condemned. The increased public concern for victims of abuse then had to be translated into changes in professional priorities and organisation. So, for instance, the Maria Colwell inquiry in the UK (Security 1974) identified faults in the whole system which, at that time, was not designed with child abuse as a prominent concern. As a consequence of these early inquiries, formal procedures for investigations of allegations and professional collaboration have been established in the UK and USA. Later inquiries have increasingly become focused on professional performance, with at least as much attention being given to whether procedures were followed as to assessing the quality of professional judgement and decision-making.

Why should professional error be so often seen as a sufficient explanation rather than just another puzzling factor that needs understanding? One reason is undoubtedly that it identifies someone to blame. When society is shocked and outraged by a child's terrible tale of suffering, there seems a basic human desire to find a culprit, someone to bear the

guilt for the disaster and to be the target of feelings of rage and frustration. Of course, with these child deaths, it is a parent or carer who is primarily responsible for the homicide but this does not seem to satisfy the urge to blame. When Liam Johnson died in London in 1989, his Member of Parliament demanded a public inquiry, asserting that his death proved that 'something went very wrong' (London Borough of Islington, 1989). Perhaps because public money funds a complex set of services to care for children and protect them from precisely these sorts of tragedies, the public feel entitled to expect professionals to bear the responsibility for failure. In Liam Johnson's case, however, the public inquiry firmly concluded that the death was unpredictable and no professional deserved blame.

Whatever the dynamics at play, the public's emotional responses to child abuse deaths are complex and powerful, and seem to include a deep need to find a scapegoat. The traditional inquiry meets that need by focusing primarily on whether any professional was at fault.

Traditional solutions

The resemblance between child protection problems and other areas of work is clearly apparent when we look at the solutions that are proposed to prevent errors. Humans are seen as the prime source of unreliability and so solutions focus on ways of minimising and controlling their erratic behaviour. The three main mechanisms have been intertwined in recent developments in child protection services:

- Punish the culprits and so encourage the others to be more diligent;

- Reduce the role of individual human reasoning as much as possible, formalising where possible with increasingly precise instructions to the human operators;
- Increase the monitoring of practice to ensure compliance with the instructions.

If we look at these in turn, blame is a major feature of professional life these days. Front line workers are in no doubt of the fate awaiting them if they are caught up in a child death. To some extent, doctors and social workers must accept responsibility for malpractice but many of the mistakes identified in investigations are individually fairly trivial and it is only because they coincided with other small errors that the disastrous sequence of events occurred. In a recent UK inquiry, for instance, a social worker was criticised for failing to get a new copy of a faxed medical report that was smudged and difficult to read. (Health 2003).

The 'blame' culture is not peculiar to child protection but seems to be a part of society in general (Hood and Jones 1996). However, its manifestation in this context has significantly increased the risks of punishment to individual workers. If the threat of punishment is an effective way to modify human behaviour, then it should be operating at the maximum level within the child protection service.

The second major mechanism for reducing human error is to limit the scope for fallible, individual actions by replacing humans with tools as far as possible and giving them

detailed instruction manuals for the tasks they still have to do. This has happened on a large scale in child protection.

At the time of Maria Colwell's death in 1973, social workers in the UK operated with a surprising degree of privacy and autonomy. There were few standard forms to complete except in relation to legal proceedings. Recording was intended mainly to assist workers and supervisors in reviewing the casework process rather than to provide information for managers on how time was being spent. Social Services Departments were run as professional bureaucracies that, respecting professional expertise, allowed social workers a high degree of discretion (Adams 1998). Practice was therefore highly individualised and variable. A detailed and large-scale study of practice in the 1970s concluded:

> A feature of all the studies was the wide-ranging freedom which social workers had to choose the style and content of their direct work with clients (Parsloe and Stevenson, 1978, p.134).

The degree of change in the past two decades is, therefore, substantial. Practice has been transformed by several innovations. The autonomy of the individual has been steadily eroded by the introduction of increasingly detailed protocols, procedural manuals and assessment frameworks. Risk assessment and decision-making instruments are increasingly being introduced to standardise practice and minimise the scope for individual professional judgement.

The third mechanism for reducing human error is to monitor practice more stringently and this is a clear feature of recent developments in child protection. Again, the changes here are not just peculiar to child protection but part of a much broader phenomenon. What (Power 1997) terms 'the audit society' has transformed all branches of the public sector. For a range of reasons – social, economic and political – there is now a demand for greater transparency and accountability in all public services (Munro 2004). Public confidence and trust in professional expertise has weakened and the political shift to neo-liberalism has led to more concern to ensure taxpayers' money is being wisely spent. Similar developments in the USA led to the Government Performance and Results Act 1993 that mandated that federal agencies establish standards for measuring their performance and effectiveness.

Professional autonomy has been further reduced by the 'new public management', which assumes that public bureaucracies are inherently inefficient and seeks to introduce market mechanisms to counter this. Consequently, British social work departments now operate under tight managerial surveillance, with performance targets set by government, and a complex set of information-processing tools to record what work is being done. This audit system is not just a neutral mechanism monitoring that professionals are doing what they say they will do. It is increasingly dictating what professionals should do and how they should do it. The web page of the Audit Commission asserts that audit is designed 'to be a driving force in improving services' (www.Audit-Commission.gov.uk). These developments mean that the responsibility for developing professional knowledge and

skills is being merged with managerial and political goals of improving efficiency and effectiveness.

Have the solutions worked?

What has been the effect of such pervasive changes? There has certainly been no dramatic improvement in children's safety or well-being. A global judgement about whether children's welfare has improved in the UK is difficult to make and many of the most important influences on their well-being have been independent of children's services. Child poverty, for instance, has increased from 10% in 1979 (when a conservative government was elected) to 30% now (despite an explicit aim of eradicating child poverty, the current Labour government has only taken about half a million children out of poverty, leaving 3-4 million behind). Measures of child protection social work provide a mixed picture and it is not always easy to know their significance. Child deaths have not reduced; reported child abuse has increased (but for all the familiar reasons may not indicate an increase in incidence); the number of children taken into public care has increased – but, again, it is hard to know whether to interpret this as a positive or negative finding. There are, however, some major causes for concern.

First, services in both the UK and USA have become increasingly concerned with providing a crisis, reactive response to allegations of abuse, with a reduction in provision of preventive, supportive work with families (Health 1995; Waldfogel 1998). Despite repeated government exhortations to re-focus and put more emphasis on early intervention, social services departments in the UK are finding it hard to comply because the public pressure to avoid any child deaths keeps serious child abuse at the top of the

agenda. Moreover, each investigation of an allegation of abuse now takes more time and effort as the procedures to follow have become more and more detailed. Consequently, the time and resources available for other areas of child welfare have been reduced.

Secondly, staff morale has slumped leading to serious problems in recruiting and keeping experienced personnel. As recently as the early 1990s, child protection workers were seen as the elite branch of social work but, nowadays, some London boroughs have vacancy rates of 40% and those in post are often agency staff on short term contracts, many recruited from overseas. The London Borough of Brent, for example, one of the most deprived parts of the city, has no social worker in their duty teams who has trained in the UK. Social work as a career has also lost favour. Applications to training courses plummeted by 59% between 1996 and 2001. Despite an expensive government advertising campaign in the past couple of years, applications have only risen by 8% from their low base.

Thirdly, a picture of current practice in the UK was provided by a recent public inquiry into the death of Victoria Climbie (Department of Health, 2003). While a single case cannot be assumed to be representative, it involved several different agencies in London and gives a vivid account of how professionals responded to information about this child. Like the New Jersey foster care inquiry, it does not reveal a complex case requiring exceptional talent but an apparently straightforward case in which numerous professionals failed to follow basic principles of practice.

Victoria spent her early years with her parents in the Ivory Coast but, when she was seven, they gave her to a great-aunt living in France, hoping this would increase her life opportunities. Five months later, after coming to the attention of the French child welfare services, the great-aunt moved to London, leaving her own children in France but bringing Victoria with her. In less than a year, Victoria was dead, having suffered months of serious physical and emotional abuse, spending her last days, tied up in a black rubbish bag in a bath, malnourished and being frequently beaten. Her sufferings were horrific but what astounded the country was the realisation that her sufferings had not been hidden. She had been known to four social services departments, two specialist police child protection teams, two housing departments, and was twice admitted to hospital because of suspected abuse. I have read every inquiry report since 1973 and this one stands out for describing a level of practice – in all the professions and all the agencies – that is outstandingly worse than any other. It was not that the mistakes were of a different kind but that they were so numerous; poor practice seems to have been the norm rather than the exception. The report into her care concluded:

> Victoria died because those responsible for her care adopted poor practice standards (Dept. of Health, 2003, para. 6.94).

This overview of developments in child protection suggests that are causes for concern about the traditional approach to improving practice, making a fresh approach worth considering.

Systems investigations

The cornerstone of the paradigm shift from a traditional to a systems investigation is to take human error as a starting point for inquiry, not as a satisfactory explanation in itself. *Why* did so many professionals in Victoria's case adopt poor practice standards? Lord Lamming, who chaired the inquiry, concluded his report with the comment:

> Even after listening to all the evidence, I remain amazed that nobody in any of the key agencies had the presence of mind to follow what are relatively straightforward procedures on how to respond to a child about whom there is a concern of deliberate harm (Dept. of Health, 2003, para. 1.19).

His puzzlement, however, is stated as a conclusion instead of a question triggering further investigation. His inquiry reiterates the traditional solutions of *more* blame, *more* procedures, and *more* monitoring, without asking why previous, similar, solutions have not been working. Yet, finding an explanation of why people were operating at such a low level seems essential if we are to find ways of making significant improvements.

A systems approach treats human error as a starting point because it has a complex view of causality and the role the individual front line worker has in the sequence of events. When the traditional investigation identifies professional error, it is assumed that the professional 'could have done differently' and so can be held responsible and merits censure. In the case of Victoria Climbie, for instance, the inquiry acknowledged that the key social worker was working under adverse circumstances: she had never dealt with an

investigation into an allegation of abuse before; she received only thirty minutes of supervision over a period of 211 days, from a senior who was developing a major psychotic illness and gave her little sensible advice; and she had a caseload of nineteen families, seven more than the maximum set down in the staff handbook. Nonetheless, the inquiry held her responsible for her incompetence. She was not only sacked from her job but put on the official list of people considered unsuitable for working with children.

In contrast, in a systems investigation, the operator is seen as only one factor; the final outcome is a product of the interaction of organisational culture, technical support, and human performance factors. The ideal image of human rationality – captured in classical decision theory– is of an individual rapt in thought, contemplating all the evidence before reaching a conclusion. Research of rationality 'in the wild' reveals a different picture (Hutchins 1995). Judgement and decision making in child protection are best seen not as discrete acts performed by individuals in isolation but as part of a constant stream of activity, often spread across groups, and located within an organizational culture that limits their activities, sets up rewards and punishments, provides resources, and defines goals that are sometimes inconsistent (Woods, Johannesen et al. 1994). Human errors are, in general, not random and individual but follow predictable patterns that can be understood by seeing them in their context.

Systems investigations have highlighted how the traditional solutions to human error can, themselves, be the source of further errors. In 1979 there was a serious nuclear accident at the Three Mile Island power station. The reactor core melted partially, and some

radioactivity was released into the atmosphere. The Kemeny Commission, the presidential board that investigated the disaster, concluded that faults with equipment played a small part but the major causes lay in the poor performance of the operators (Kemeny 1979). Not only did they not take the correct steps to solve the problem, their actions made it worse. As with children's deaths from abuse, their failure seemed all the more surprising because such efforts had gone into improving their practice. Engineers had thought carefully about all possible accident scenarios and developed warning systems to alert the operators to any fault or abnormal reading. Indeed, they had been so diligent that, at the time of the disaster, the control room had more than 600 alarm lights. A later review of the event showed more compassion for the operators (Wildavsky 1988). Yes, they had misread the signals, but when such a major accident occurred, so many red lights started flashing that the human brain would have difficulty in accurately interpreting their significance. Efforts to improve safety had inadvertently introduced new dangers. Each alarm system, on its own, added to safety because it showed when something was going wrong and, if it started flashing on its own, operators would have no difficulty in understanding its significance and taking the appropriate action. But, in a serious accident, the effect of such a precautionary system was to be bewildering because so many alarms went off simultaneously.

The two reports – by Kemeny and Wildavsky – illustrate two opposing approaches to error investigation. Kemeny followed the traditional style, looking first of all for evidence of technical failing and then for failings in the human performance. When human error was detected, this was seen as providing a satisfactory explanation.

Wildavsky, on the other hand, adopting a system's approach, took the human error as a starting point for investigation, not as a conclusion, and saw how changes to the system intended to improve it had had the unintended effect of making the task for the operator more difficult.

A framework for systemic inquiry

As the phrase suggests, a systemic inquiry looks at the whole context and so the potential areas to cover are numerous. Within the limits of this article, I want to, first, outline a framework for analysis and, then, within that framework, focus on three issues that seem to me to be particularly significant in child protection at present.

(Woods, Johannesen et al. 1994) provide the following diagram to illustrate the layers of analysis that need to be undertaken.

Diagram 1 around here.

At the 'sharp end' of the system are the practitioners interacting with children and families. Whether or not they are able to provide effective help will be a result of the interaction between the difficulties and strengths of the family (what they bring to the contact) and the expertise and resources the practitioners bring. Influences on the actual level of professional performance achieved can be grouped into three layers:

1. factors in the individual
2. resources and constraints

3. organizational context.

Factors in the individual: this includes the knowledge and skills they can draw on in solving problems, the attentional dynamics - factors that govern the control of attention and the management of caseload as situations evolve over time, and strategic factors – the tradeoffs between different goals that conflict.

An investigation into how the front line workers were operating seeks to understand their 'local rationality' (Reason 1990) –how the circumstances appeared to them and how their choice of actions made sense to them at the time. In Victoria Climbie's case, for example, with the social worker who was criticised for picking up a smudged fax and failing to contact the hospital for a clean copy, why did she act this way? Her reasons did not come out in the official inquiry but, since then, she has defended her decision by pointing out that the fax consisted of nineteen badly smudged pages; she did decipher the first page - the covering letter – and this said, inaccurately, that the doctors had no child protection concerns about the child. Therefore, the time and energy required to read the fax or to request a hard copy did not seem justified given the other demands on her time. How much this explanation exonerates her is debateable but it illustrates that she was not acting from malice or indifference. She clearly did not think that the fax might contain crucial information that would dramatically alter her assessment of Victoria's safety but she could not be bothered to find out what it said.

The critical recruitment problem in UK social work at present, and the dearth of experienced workers, is likely to be having a major impact on the quality of front line work.

The factor I want to discuss in more depth in this category is that of emotional wisdom. The engineering literature tends to address the cognitive elements of performance with little attention to emotions. I doubt whether they can be ignored in any work context but child protection certainly makes psychological demands on the worker. A child in distress arouses a response in most people – hence the strength of the public reaction when a child dies. But working with families carries many emotional pressures. Workers can get caught up in the dynamics of the family as well as bringing their own experiences, sometimes constructively and sometimes not, to their work. In the days when psychosocial casework was dominant, attention to the emotional impact of work was a major component of supervision. In the UK however, supervision has now become less available and when it does take place the major purpose is a managerial monitoring of whether the procedures have been properly followed rather than a professional review of the casework process and the judgements and decisions made (Rushton and Nathan 1996). This undervaluing of the emotional dimension may have significant adverse effects on both families and the workers themselves.

In the report on Victoria Climbie, one feature that stands out is the apparent lack of concern and compassion shown towards her. No one engaged her in any substantial conversation during the eleven months she was in contact with various agencies. No-one

appears to have reflected on what her life was like: whether or not she was being physically abused, it was known that she had been taken from her birth family in the Ivory Coast and was living in a country whose language she did not speak, in a hostel for the homeless where many of her co-residents were drug addicts or had mental illnesses. She was not attending school. She clearly needed help irrespective of the issue of abuse.

The failure to empathise undoubtedly contributed to the defective assessment of her needs but it also raises disturbing questions about the staff who came into contact with her. People who choose to join a helping profession do not begin as callous and uncaring so, if this is how they treated Victoria, what had happened to them? One possibility is that there is a high degree of burnout in frontline workers nowadays (this would also partly explain the high number leaving the job). Burnout has three dimensions: emotional exhaustion, depersonalisation (or cynicism), and reduced personal accomplishment (Maslach, Schaufeli et al. 2001). The main symptom is exhaustion and it leads people to distance themselves emotionally and cognitively from their work, with predictable consequences for the children and parents who come into contact with them.

The public inquiry into Victoria's care made no comment on the psychological health of the workers it criticised except to report that the senior social worker responsible for supervising the key social worker had become psychotically ill by the time of the inquiry and was probably becoming ill at the time Victoria was being seen.

Overall, the rise of a managerial approach to social work tends to have downplayed feelings and framed the tasks as essentially cognitive. This seems to me to be a serous error since any system designed on such an inaccurate assumption about the workforce is going to have a fundamental flaw. It is well established that emotions influence cognitive performance (Baron 1994) and we should also be concerned for the emotional well being of both families and staff.

Resources and constraints: this second category includes the obvious issues about what services are available to help practitioners assess or work with families. How easy is it to arrange an expert psychological assessment or offer help with coming off drugs? For UK social workers, the reality of recent years has been that there are fewer and fewer support services available so that for most families caught up in the child protection system they experience a distressing investigation of an allegation of abuse followed by no help, even though most of them, whether or not abusive, are in adverse social and financial circumstances and struggling to cope (Farmer and Owen, 1995).

Within this category, the issue I want to focus on is the impact of the tools that front line workers are now expected to use. Procedural manuals, information-processing tools, and instruments to help risk assessment and decision-making are now widespread and have transformed the nature of child welfare work. They have all been introduced with the good intention of improving front line performance but are they doing so? Do they improve reasoning skills and outcomes for children or are they, in fact, a hindrance to workers?

Again, the engineering literature provides some valuable lessons. Design has usually been tool-centred rather than user-centred (Norman 1993). In deciding what tools to design or what parts to formalise, engineers have tended to select those that it is technically easy to do. This has permeated the approach to developing tools and to automating or formalising aspects of any process. It seems to be assumed that tools or formalisation are intrinsically good and so the more the better. Little attention is paid to whether these are the aspects that humans do badly and where technical assistance is most needed. Nor is much attention given to how use of the tools impacts on the bits of the task that are left over for humans to handle.

This approach led to serious problems in, for example, aviation (LaPorte and Consolini 1991; Pool 1997). The pilot's job was radically altered through automation. Previously they had been flying a plane with some assistance from equipment but with a constant awareness of what was going on and what each dial was reading. Automation led to a cockpit in which the plane was essentially flown by a computer; the human pilot only had to step in if something went wrong. Unfortunately, this meant that, when they did have to step in, they were thrust straight into the middle of the problem with limited knowledge of what had preceded it. They were, therefore, poorly equipped to diagnose the problem and deal with it. When they misinterpreted the evidence and the plane crashed, the disaster was blamed on human error but blame should also go to those who designed a cockpit that created such challenging cognitive tasks for the pilots. Fortunately for passengers, this systemic analysis has led to modifications being made to the cockpit

instrumentation to increase pilots' awareness of what is going on at all times so that they are better prepared in the event of a crisis.

Are developments in child welfare vulnerable to similar criticisms? Have academics tended to offer the assessment instruments or decision-making tools that they know how to design? Or have they been user-centred and started by looking at the task, the human cognitive and emotional abilities of practitioners, and considered what help is needed, and at what stage in the process?

Given the extent of innovation in terms of tools, there seems a surprising dearth of research about how they are actually used and whether they are contributing to a better service. The studies that have been done provide evidence that the various tools are not being used as the designers intended. English and Pecora described workers completing a decision making instrument *after* they had made their decision, to justify and document it rather than to guide them in making the decision (English and Pecora 1994). Lyle and Graham found workers deliberately inflating their rating of risk items on a risk assessment instrument to ensure that families were classified as at high enough risk to be given the services the worker wanted them to have (Lyle and Graham 2000). Research on risk assessment instruments in other disciplines has found worker scepticism about their accuracy, preferring to trust their own clinical judgement instead (Harris, Rice et al. 1993; Krysik and LeCroy 2002).

There is an emerging literature in child protection questioning whether tools are being designed and implemented with a realistic picture of the practice world in which they will be used (Schwalbe 2004). There has also been a tendency to give little attention to the worker's contribution to the effective use of a tool. A risk assessment instrument, for instance, can list what information is needed but it is the level of the worker's skill and knowledge that determines how accurate and complete the information collected is, and this, in turn, will determine the accuracy of the instrument's prediction. Rycus and Hughes complain:

> Much risk assessment training has been likened to teaching airline pilots how to complete a pre-flight checklist before taking off, without ever having taught them navigation, meteorology, or even the essentials of flying the plane. Yet, many jurisdictions continue to expect two or three days of training on a risk assessment model to fully prepare staff to implement it consistently and accurately (Rycus and Hughes 2003).

A systems approach not only highlights the importance of finding out how tools are actually being used but also makes us aware of rival ways of interpreting those findings. The traditional approach, echoing the approach of inquiries into child deaths, tends to classify any usage that differs from what was intended by the designer as 'human error'; the fault is only seen to be on one side. This then leads to the usual solutions, described earlier, of chastising workers, increasing training with more detailed manuals, and increasing managerial oversight of compliance with instructions.

Alternative interpretations of the findings can be found by taking the workers' point of view seriously. What is their 'local rationality' that makes it seem sensible to them to modify or ignore tools that should be making their work easier? It may be that they have an irrational resistance to formal methods of reasoning but there are more respectable possibilities. Two factors that I want to speculate about here are (a) conflicting views on the nature of human reasoning, and (b) the dual character of many tools.

In trying to theorize about human reasoning, there have classically been two models: the analytic and the intuitive. Analytic reasoning is formal, explicit, and logical. Ideally, every step of the reasoning process is spelt out, as in a proof in formal logic. Intuitive reasoning, in contrast, is seen as inarticulate, swiftly reaching a conclusion on the basis of largely unconscious processes. The designers of tools tend to take analytic reasoning as their model and develop instruments based on probability theory and formal decision theory. Front line workers have historically, shown a preference for intuitive reasoning. From this starting point, it is hardly surprising that there should be a clash between the two groups. The question is how to resolve the conflict.

One avenue to a resolution is offered by Hammond's "Cognitive Continuum Theory" (Hammond 1996). He argues that, rather than being two opposing modes of thought, it is more realistic to see analysis and intuition as on a continuum, with people choosing a more analytic or intuitive approach depending on the circumstances. When, for example, speed or background knowledge of culture and psychology are crucial (as in interviewing

a family) intuitive reasoning is more functional. When there is time, a need for public accountability, or the consequences of the cognitive task are serious (as in deciding on removing a child) then a more deliberative approach is preferred. I have argued in more detail elsewhere about how this continuum approach can be developed in child protection work (Munro 2002). However, in this context, the point to make is that it opens up the possibility that front line workers' resistance to using tools as the designer intended may have some rational justification and it is worth studying it in more detail.

The second factor I wish to draw attention to is the dual character of many tools now routinely used in child protection: improving workers' performance and supplying information for management. As I mentioned earlier, there have been radical changes in the way child protection services are managed and the new public management requires detailed information about what work is being done.

Managers have to rely on front line staff to supply much of the data and so many of the forms workers are expected to complete are designed to meet the needs of management as much as the users. The repercussions of these fundamental changes needs to be studied in more detail (Munro 2004) but the UK provides one stark illustration of how significant they have been. Recent research on workers' activities found that, due to the increased administrative demands, the amount of time spent in direct contact with families has dropped from 30% to 11%. The increase in paperwork is also a significant factor in the current recruitment problems. In the Audit Commission's large scale study of why

workers were leaving, it was identified as the main factor driving people away (Commission 2002).

To sum up, I am not arguing against the use of tools. Indeed, in view of the limitations of human cognition and the biases in reasoning that intuition is prone to, there is a strong case for arguing that some type of tools could help practitioners. However, there also seems a strong case for arguing that current efforts are not well designed and need to become better tailored to the real practice context in which they will be used.

Organizational context: this third category influences the amount of knowledge and skills brought to bear on the front line work through investments in training and provision of support. It has a particularly important influence on the strategic dilemmas practitioners face in that it conveys overt and covert messages about what is valued or disparaged. These can increase the complexity of the tradeoffs they have to make, especially when they are conflicting, and place workers in a 'double bind' where they are liable to be criticised whatever they do.

In child protection work, there is a persistent and unavoidable dilemma between supporting families and protecting children, balancing the rights and needs of children and parents. The history of the past few decades shows fluctuations in society's view of where the balance lies. When family support has priority, the threshold for removing children rises and more children will be left in a dangerous setting. A death then triggers a swing towards prioritising protecting children. The threshold for removal falls, more

children come into care and then there is a backlash when the general public fear that professionals are getting too powerful and invading the privacy of the family too readily (Myers 1994; Munro 1999).

This classic dilemma is easier for the individual practitioner to handle when he or she is working within an organization that acknowledges the problem and gives a clear and consistent message about where the balance currently lies. However, in the UK, senior management seem to have a problem with this at present because they, in turn, are getting an inconsistent message from central government. Official policy clearly states that more attention must be given to supporting families and less time spent on expensive investigations of allegations, most of which do not reveal serious abuse. There is no acknowledgement, however, that reducing the number of detailed investigations done will lead, in some cases, to decisions about the seriousness of abuse being based on less information and hence being more fallible. There is no official acceptance of the increased risk of child deaths. Indeed, the response to the recent death of Victoria Climbie reinforced the message that the first and overriding concern must be the safety of children. Perhaps official policy can, somewhat cynically, be summed up as 'you must work in partnership with parents and support them in all cases except those that hindsight reveals to have been dangerous'. Unfortunately, front line workers have to make decisions without the benefit of hindsight.

Current government policy is creating another, new, conflict for practitioners. The welfare of the child must be the prime concern. At the same time, they have introduced a

complex system of targets and performance indicators, and an accompanying pile of paperwork, and told social services that they will be evaluated and judged in the light of this system. This creates dilemmas about which matters most – the child or the performance indicator. On a daily basis, this shows up in decisions about how to spend your time, talking to a child, reflecting thoroughly on a case in supervision, or completing forms. Since future budgets depend on current scores on performance indicators, senior management are understandably concerned that paperwork gets done.

The Audit Commission provides a neat example of how the battle between therapeutic and managerial goals is played out. In evidence to the Climbie inquiry, the chairman of the Audit Commission complained that social workers were sticking too rigidly to the timetable for completing an investigation so that case conferences were being held before all the relevant information had been gathered, damaging the quality of the assessment and decision making. In the same year, the Audit Commission published the league tables on how local authorities were performing which rated how successfully they had met the timetable for investigations – with no concession that failure to hold a conference in the specified time could indicate good practice as well as bad.

The greater intrusion of government into the lives of senior management and of both government and senior management into the lives of front line workers is proving very problematic, creating conflicting demands and double bind situations. With the best of intentions, central government is having a pervasive and, I would argue, detrimental

impact on the experience of the children and parents who come into contact with social workers.

Conclusion

Children's safety and well-being are of vital importance in any society so there is heavy public pressure to improve child protection services. The professions involved have put considerable effort, thought, and resources into raising standards. However, social workers learned from the controlled trials evaluating practice in the 1960s and 70s that good intentions do not guarantee good outcomes for service users and that lesson is just as relevant today. It is crucial to evaluate the numerous changes that have been introduced in recent years. Are the tools designed to help practitioners achieve a higher standard of work actually having the desired effects or are they absorbing time and money with little benefit? Could they even be having a positively detrimental effect on workers' performance?

A systems focus radically changes the traditional perspective. Instead of the front line workers dominating the picture, the limits of their autonomy are recognised and they are placed in their wider context. Investigations to understand why they lapse from the desired standards of practice consider the full range of factors operating on them: do they have the necessary knowledge and skills, are the right resources available to support them, does the organisation set feasible and consistent goals?

The fallible human operator is not then seen as the central problem with solutions trying to find various ways of eliminating or reducing their role. Instead, the investigation starts

by looking at what is needed to do the job well and then considering what aspects humans are good at and where they need help. The inquiry then works outwards to find out whether the organisation is providing the context in which high quality work can be done. Solutions tend to take the form of redesigning the task so that it makes feasible demands on practitioners, taking a realistic view of human cognitive and emotional skills.

Evaluating the changes that have occurred in child protection practice is particularly necessary because they reflect both professional and political needs that, while having a surface similarity, have significantly different priorities. All public sector services have been exposed to demands for greater transparency and accountability by social pressures and the needs of the new style of public management. This has led to new ways of describing and recording what work is being done, and placed heavy demands on front line workers to complete the information processing tools that provide the basic data for management. The professional goal of improving practice has also encouraged a more transparent and testable way of working, encouraging practitioners to articulate their reasoning more clearly and to use empirical evidence where available to inform their decisions. However, the aspects of practice that get recorded for management purposes cannot be assumed to coincide with the aspects needed for professional development. In the UK, the audit system that has been developed places more emphasis on recording the easily measured elements of work and so has given more attention to measures of quantity than of quality. This inadvertently undervalues the more nebulous, but often more difficult, aspects such as relationship skills in working with angry or frightened

people, or making sense of human behaviour by placing it in its social and psychological context.

The individual case with a tragic outcome attracts public attention and, quite reasonably, there is a demand to look into what happened. The public want to know if anyone other than the perpetrator is to blame and whether lessons can be learnt to prevent similar cases happening again. However, a focus on the individual case where a child dies has limited scope for teaching us what is working well or badly. The systems approach offers new ways of framing the problems and holds out the promise of more effective solutions.

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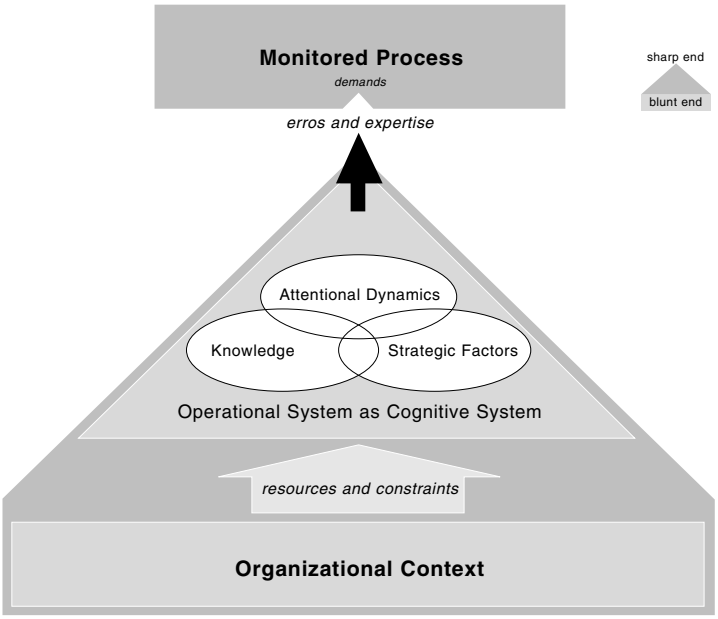
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