

Barriers to knowledge acquisition and utilisation in child welfare decisions: A qualitative study

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Paul McCafferty  and Brian J Taylor

School of Applied Social and Policy Studies, Ulster University, Northern Ireland

Abstract

- *Summary:* Permanency decisions in child welfare are recognised as being challenging. Nevertheless, society and the profession expect that professional judgements should be of the highest quality, consistent, reliable, fully justified and informed by evidence of what works, particularly where decisions are potentially life-changing. However, barriers to knowledge acquisition and utilisation exist, preventing practitioners from gaining the full range of knowledge they require, leading to permanency decisions being interventionist and protectionist in orientation (author, 2020). Think-aloud protocols and semi-structured interviews, in conjunction with a vignette, were used with social workers ($N=17$) in statutory services to explore barriers to knowledge acquisition and utilisation in permanency decisions for children in state care.
- *Findings:* The main barriers to knowledge use were (1) misunderstanding or misuse of theory, (2) limitations in training and learning and (3) organisational issues.
- *Applications:* By developing a real-world understanding of the barriers and listening to the views of the professionals themselves, we can begin to realistically inform policy and practice, with the aim of decreasing the barriers to knowledge acquisition and utilisation in permanency decision-making. If we appreciate the barriers to knowledge acquisition and utilisation in permanency decision-making more fully, then perhaps we can reduce them, thereby facilitating more fully informed decisions that best serve the individual needs of children and their families.

Corresponding author:

Paul McCafferty, School of Applied Social and Policy Studies, Ulster University, Northern Ireland.

Email: p.mccafferty2@ulster.ac.uk

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When making permanency decisions in child welfare, professionals are entrusted both ethically and legally with acting in children's best interests and deciding where and how those best interests are met (Bartoli & Dolan, 2014). Taking place within an interconnected set of complicated ethical, legal and policy contexts, these best interest decisions are recognised as being amongst the most inherently challenging and complex decisions a child welfare worker is likely to make. Inevitably, the innately complex nature of these decisions presents professionals with practical, philosophical and personal challenges, as they struggle to satisfy the often-competing demands, expectations, views and opinions of service users, other professionals and service systems such as the court (Spratt et al., 2015). As such, it is recognised that contemporary child protection social work is now, more than ever, practised within a progressively intricate milieu of rapid change and that practising social work in child welfare is now more multifaceted, complicated, diverse and challenging than at any time in its history.

There are numerous conceptualisations of human judgement and decision processes on which we can draw in order to understand social work decision-making in child welfare (Taylor, 2012a). Baumann et al. (2011, 2014), like Munro (2005) and Benbenishty et al. (2015), suggest that decision-making can only be understood by thoughtful consideration of its situated context. Decisions are taken within an agency background and culture, where a systemic context combines with the case decision made by staff and management of the agency. These include a range of micro- and macro-elements such as case, external, organisational and individual factors that combine in various ways to influence decisions and outcomes.

Decisions are also affected by the cognitive structure, the heuristics and schema held by the individual: the individual's attitudes, beliefs, values and knowledge (Eiser, 2001). Davidson-Arad and Benbenishty (2008) and Davidson-Arad et al. (2010) found that more positive attitudes towards removal contributed to more intrusive intervention decisions and higher risk assessments. There may be a tendency to base judgements of risk on attitudes rather than on knowledge-informed calculations, which may lead to inconsistencies in decisions in abuse cases (Brandon et al., 2009), leading to criticism when children at risk are not sufficiently protected (Munro, 2008; Platt, 2006a, 2006b; Reder & Duncan, 2004).

Described as intuitive, such decisions may be based on practice wisdom (O'Sullivan, 2011) and may be understood in terms of heuristic (or short-cut) models of decision-making (Brighton & Gigerenzer, 2012). When we make

heuristic decisions, Simon (1956) – seen as the founder of the notion of heuristic decision-making – argues that we select the first available option that is *good enough* in satisfying some minimum criterion. Described by Taylor (2017b) as a *satisficing approach*, we decide on a course of action that is *good enough* until more time etc. is available to think and act with more deliberation (Schooler & Hertwig, 2005). Of course, this intuitive way of deciding has been criticised for the inherent potential for bias (Whittaker, 2018).

For this reason, Sheldon and Macdonald (2010) espouse the case for using a more analytical approach. Analytic decision-making counts on rationality and the probability calculus to suggest how to best make decisions. Here, decision-makers heighten the expected utility value of their choices by putting time and effort into allowing for alternate actions, reflecting about potential consequences and choosing the option that looks most likely to satisfy their goals. To do so in the multifaceted world of social work, requires the use of analytical decision-making tools that assist the social worker to come to a more rationally calculated decision (McDermott et al., 2017; Shlonsky & Wagner, 2005). Munro (2008) and Shlonsky and Wagner (2005) postulate that analytical decision-making tools have the potential to expedite a more complete analysis of the obtainable options and their consequences. By acting and thinking analytically they argue, the decision-maker is better equipped to consider the case factors systematically and objectively.

Intuition cannot be totally disregarded, however. Social workers may still be required to use their moral reasoning to ascribe weights to the presenting variables, even though these may be disputed and indistinct (White & Stancombe, 2003). Accepting the practice reality – that some essential details about a case are challenging to establish clearly (Thompson & Dowding, 2009) and that a case may contain multiple imperfect indicators that are difficult to quantify (Hammond, 2000) – is the starting point for reconciling intuitive and analytical models of decision-making (Taylor, 2017). To this end, Shlonsky and Wagner (2005) propose combining intuitive (clinical) with analytic (actuarial) judgements in a single assessment tool, classifying risk factors identified by practitioners intuitively, which are then ordered and scored analytically. Referred to as Structured Decision-Making, Barlow et al. (2012) argue that such a process integrates objective evidence – gained through experience, research, theory, trials, service user knowledge, legislation and policy (O’Sullivan, 2011; Taylor et al., 2015) – with clinical expertise – and through which bias and inconsistency is reduced.

This sentiment is echoed in Northern Ireland (where this study took place) with the Department of Health Social Services and Public Safety Northern Ireland arguing that it is imperative that judgements are based on professional standards and values and are informed by knowledge. Professional knowledge then, argues the Department for Education (2015a, 2015b) and the Department of Health for Northern Ireland (2017), is a prerequisite for constructing professional judgements about actions to be taken and to intervene authoritatively to protect a child’s welfare. More broadly, on this very point, Croisdale-Appleby (2014) and Sir

Martin Narey (2014) in their separate reviews of social work education emphasise the universal need for social workers to understand and apply to their social work practice, the relevant principles, methods and knowledge of social work, in an attempt to further the understanding of social work through evidence gathering and through research.

Yet newer research by McCafferty (2020) questions the extent and depth to which knowledge is used in child welfare, and how much decisions – particularly permanency decisions – are informed by knowledge. McCafferty research findings suggest that rather than making permanency decisions that are wholly knowledge-based, that the reality is somewhat different. McCafferty's (2020) findings suggest that practitioners' use of knowledge to make permanency decisions is somewhat more limited, and not as fully evidence-informed as one might expect. Findings in this study suggest that when making permanency decisions, rather than making decisions using the widest range of evidence possible, that participants' decisions were largely restricted to using organisational and practitioner knowledge at the expense of research, theoretical and service user knowledge; sources of knowledge which Pawson (2003a, 2003b) argues are as equally important if one is attempting to make fully informed decisions.

Furthermore, McCafferty's (2020) research suggests that by using only two sources of knowledge, i.e. legislation and practitioner knowledge, that participants' decisions were considerably more interventionist and protectionist in orientation, favouring adoption and fostering over kinship or a return home. Although a small-scale study, this finding somewhat challenges the ideal notion of the knowledgeable practitioner making judgements that are based on professional standards and values and informed by knowledge of current research and literature. These circumstances, in which permanency decisions may not be fully informed, inevitably creates conditions of opacity in the decisions themselves. In such circumstances, the permanency decisions that are taken may not be wholly in line with policy, may contravene a child's human rights, go against the principles of social justice and could no-doubt be open to challenge and interpretation in formal decision-making fora such as court.

Not unaware of this inherent dichotomy and their bounded knowledge base, but simultaneously articulating the desire to be more knowledgeable, the participants in the study outlined certain barriers they encountered to knowledge acquisition and utilisation. This article explores this aspect of author's research in more depth, outlining the barriers that the participants themselves identified as impediments to their learning. By developing a real-world understanding of the barriers and listening to the views of the professionals themselves, we can begin to realistically inform policy and practice, with the aim of decreasing the barriers to knowledge acquisition and utilisation in permanency decision-making. If we appreciate the barriers to knowledge acquisition and utilisation in permanency decision-making more fully, then perhaps we can reduce them, thereby facilitating more fully informed decisions that best serve the individual needs of children and their families.

The research question therefore is: What are the barriers to knowledge acquisition and utilisation in child welfare permanency decision-making?

The aim of the research is: To explore the barriers to knowledge acquisition and utilisation by social workers when making decisions about the permanent placement of children at risk of abuse.

The research objectives are:

- (i) To understand the perceived barriers to knowledge acquisition and utilisation when making permanency decisions.
- (ii) To make recommendations to inform personal, organisational and policy strategies to help decrease the barriers to knowledge acquisition and utilisation when making permanency decisions.

Methodology

This study took place in Northern Ireland where social workers employed by publicly funded Health and Social Care Trusts undertake a wide range of duties in relation to child welfare including: receiving referrals; supporting families; taking contested cases to court; and provision of child and adolescent mental health services, family centre work, fostering and residential care (Taylor, 1999). Five Health and Social Care Trusts, organised geographically, provide a wide range of health and social care services for a population of about two million. The findings reported here were part of a wider study on knowledge use in child welfare decision-making (McCafferty, 2020)

Design

Because the research was interested in understanding the personal views, interpretations of the phenomenon and attaining an in-depth awareness of the individualistic significance of participants' experience, a qualitative, and by extension, phenomenological-interpretivist approach was used. To collect the data, an in-depth two-stage qualitative interview was used. In stage one, thinking-aloud protocols were used to explore the knowledge and the decisions that the participants used to make their decision. Thinking aloud as a research method has its roots in psychological research with Breuker and Wielinga (1987) being the earliest pioneers of the method. The thinking-aloud method is currently accepted as a useful method to gain rich verbal data about reasoning during a problem-solving task (Güss, 2018). Using thinking-aloud protocols, researchers can identify the information that is concentrated on during the problem-solving task and how far that information is used to facilitate problem resolution (Ben Malek et al., 2017). From this, inferences can be made about the reasoning processes that are used during the problem-solving task.

Thinking-aloud protocols are of value because, as Kumar (2017) and Zhang and Zhang (2020) points out, they enable the researcher to focus on the issues the

participant has in relation to the problem under scrutiny – in this instance, the permanency decision that individual social workers made and the knowledge they used to make their decision. Additionally, this method is especially helpful as it allows the researcher to correlate the actions and statements of the participant which Patel et al. (2001) recognise as a strength of the method. Additionally, the thinking-aloud method is generally recognised as a major source of data on subjects' cognitive processes and are traditionally used to uncover the intricacies of a decision and discover data in relation to the knowledge used to inform their decision (Veenman et al., 2003). Using the thinking-aloud method enabled the researchers to get rapid, high quality, qualitative feedback, which Jungk et al. (2000) state is not obtainable with questionnaires.

However, there are limitations to the thinking-aloud protocol (Jääskeläinen, 2010). Mainly, it can tell us little of what is not conscious to participants or is challenging for them to verbalise due to extraneous factors such as stress or high cognitive overload (Earle, 2004), which participants can experience. According to Jääskeläinen (2010), only information that is actively processed in working memory can be verbalised. Since automatic processes dominate much of everyday life (Bargh & Ferguson, 2000), this is an important limitation. However, these limitations can be reduced if one uses other complimentary processes to support the thinking-aloud protocol (Jääskeläinen, 2010) which is why the researchers decided to use a semi-structured interview (discussed later) following the end of this stage.

Procedure

A realistic vignette was created Taylor (2006a), using the opinions of expert social workers, outlining an archetypal case in which Claire, aged five, needed a permanency decision made. In the vignette, there are several possible decision outcomes, each of which presents risks as well as benefits Taylor (2020a). In line with local legislation, policy and services, participants were given five viable choices at the end of the vignette – none of which were so binary that they did not present their own unique challenges – requiring the social worker to have to think carefully about what option they would choose: (1) long term foster care, (2) kinship care, (3) adoption, (4) residential care and (5) return to parents. Participants were told:

Imagine that you are the social worker for Claire. You are required to do two things; (i) make a decision regarding the permanency arrangements for Claire and (ii), outline the knowledge you used to make that decision. Please keep talking out loud as you make your decision outlining the knowledge you use to decide.

When this stage finished, an in-depth qualitative semi-structured interview took place to follow up on points of interest that arose from the thinking-aloud protocol. The semi-structured interview therefore consisted of open-ended questions

which were based on the issues that arose during the thinking-aloud stage. Each interview was recorded and then transcribed.

Sampling

Non-probability purposive sampling was used to recruit information-rich, experienced social workers. Inclusion criteria were that respondents must be:

- a child protection social work practitioner or manager who has experience making decisions regarding permanency arrangements for a child in state care;
- that they work within the statutory Health and Social Care Trust child welfare team and have the statutory authority to make judgements and court recommendations about children in state care.

Preceding the interviews taking place, it was decided that as many candidates as necessary would be interviewed, using the principle of data saturation discussed by O'Reilly and Parker (2012), to decide when to stop interviewing. It was also agreed that to ensure the objectivity of this decision, thereby reducing any potential criticism of subjectivity, that a joint decision would be made between the researchers to agree when saturation had been established and thus collectively decide when to stop interviewing. Guest et al. (2006) helpfully estimate that data saturation is typically realised when there is enough information to replicate the study, when the ability to obtain additional new data has been attained and when further coding is no longer feasible. Numerically, Fusch and Ness (2015) hypothesise that saturation typically occurs between 15 and 20 interviews and indeed this was the case with saturation occurring at 17 interviews.

Method of analysis

To analyse the typed data, it was transferred into NVivo 11 to complete a thematic analysis using Guest et al. (2012) three stage framework as:

Stage 1

- Become familiar with the data.
- Generate initial codes.
- Search the codes.
- Probe for themes within the codes.
- Review the themes.
- Define and name the themes.

Stage 2

- Display the data.

Stage 3

- Draw and verify conclusions.

Rigour

To enhance the rigour of the study, the researchers conducted a pilot study first with two participants (not included in the final study) which Flick (2015), Bazeley (2013) and Rubin and Babbie (2016) argue is an essential component of recognising and correcting deficiencies, helping the researchers develop and refine the research protocols and processes. Here, the methodology, sampling, instruments and analysis were tested for their adequacy and appropriateness. As a result of piloting, the vignette was further refined to add in more details about the foster carers. Additionally, piloting helped to establish whether the sampling frame and technique were effective, and it identified logistical problems that were corrected. Piloting likewise helped develop the research plan. For example, the pilot helped the researchers further understand the variability of conceptual meanings attached to the perceptions of key notions such as the term ‘knowledge’. Themes that were initially identified by the researchers separately were then confirmed jointly to approve their accuracy, thus satisfying the need for objectivity and precision.

Results

Respondents all had experience of making permanency decisions in relation to children in state care. Experience ranged from 1 to 19 years, with a mean of six years. Seven participants had 1–4 years’ experience, eight had 5–9 years’ experience, one had 10–14 years’ experience and one had 15–19 years’ experience. Eleven staff were at (professional) social work grade, one at senior practitioner grade and five social workers were managers. Eleven were female and six male. Eleven had partially or completely attained a Post-Qualifying Award in Social Work. Sixteen participants had attended in-service training within the past year.

The use of knowledge to make permanency decisions was the primary objective of the overall research project. Findings on this are reported elsewhere suggesting that the use of knowledge to make decisions was somewhat restricted. This finding was not lost on the participants during the research. As the interviews progressed, participants began to express a certain frustration at their lack of knowledge to inform their permanency decision, feeling that:

... social workers [are] having conflicts with themselves because we maybe don’t get the opportunities in training to look at the research ... We need to be more evidence-based. (participant 8)

This led to an in-depth dialog with the participants, during which they elaborated further on what to them were substantial barriers that impeded their knowledge

acquisition and utilisation. This paper explores the results of this aspect of the research findings, which when analysed resulted in the identification of three themes. These were (i) ability and confidence in using theory and research, (ii) training and learning and (iii) organisational issues. These themes are explicated further here.

Ability and confidence in using theory and research

All respondents said that they used research to inform their practice, although they found it difficult to provide specific examples of this. Several respondents mentioned the term *attachment* although only four described deliberate and purposeful use of this theory clearly. *Systems theory* was also mentioned by several respondents, although its application was less clear. The use of knowledge within the decision was unclear, not least because *attachment* was used as a primary rationale for diverse judgements on the best plan of care in the case vignette. For example, the need for security and stability was used to justify both adoption and fostering options:

... there is a mixture of everything in there, but it is not something I would constantly go and say, 'while using this theory and thinking of the research in this way it has made me decide that ...' it is in there somewhere. You can't quite say what it is, but it is your experience of doing it. Other than systems or attachment theory - they would be the ones that come to my mind that would be helpful to the family, but ... I can't think of any more. (participant 15)

Participants were apprehensive about citing and using theory and research, lest their lack of knowledge be found wanting in professional fora. Participants were particularly anxious about putting research or theory into court reports to support their permanency decisions. They feared that if cross examined by legal professionals with more knowledge than they, that they would feel intimidated and incapable of responding:

... there is always that niggling doubt, that if you were to use research or a theory and were ... to put that in a court report, that someone else could discredit that by maybe having a counter piece of research that you are not aware of and that can be intimidating ... (participant 5)

Because of their lack of confidence with knowing theory and research to support their judgement, respondents reverted to using legal knowledge, which seemed almost like their default position. Participants felt on solid ground with this type of knowledge, confident in their ability to cite and apply the legislation to defend their decisions:

... So, what we tend to do ... is stick to what you know, and what is there in clear black and white, and to me, that is the law. (participant 11)

Training and learning

Access to the appropriate training was cited as a barrier. Participants expressed the view that the training they received seemed perfunctory and did not necessarily meet their specific training needs. More precisely, participants expressed the view that they didn't receive enough training on how to make permanency decisions in the first place, therefore they lacked knowledge about decision-making models, processes and tools:

... sometimes the training is a wee bit tick boxy ... what training do we really get on making decisions? ... (participant 5)

Despite all working specifically in the area of permanency, these participants felt they didn't get enough training on the issue of permanency itself, and that permanency training that was offered was open only to a limited number of people due to cost.

... I don't know if we get enough training about permanency. The only training that I have had about permanency would be through [name of specialist organisation], which isn't open to everyone because it has to be paid for. (participant 5)

However, there were also admissions that they may not be as proactive as they could in seeking out the relevant training in the first place:

... Maybe it is a confidence thing. I am qualified a year and a half, and I have never gone into any training that covers specific child theories. There could well be that type of training, but I have never done it. (participant 14)

Participants expressed the fatalistic view that there appeared to be an organisational and managerial expectation that they *just get on with the job*. As a natural consequence, participants accepted that not everything was going to be seamless in their knowledge acquisition. In this sense, they just had to *get on with things*, accepting that they weren't going to get enough time to read, that caseloads were going to be too high, that there was too much paper work and that perhaps not all training on offer was of the appropriate type. Consequently, one just had to manage, and persevere:

... You just get your head down and just get on with the job. In the likes of family and childcare you are thrown into the deep end in the sense of, you're out there, and you are just expected to get on with it. (participant 17)

Organisational issues

Participants felt that their time to read, carry out research, learn new knowledge, reflect on evidence and internalise research findings was restricted due to the large

caseloads they carried. Participants expressed frustration that they were already working over their contracted working hours dealing with case issues. They expressed apprehension that not only were their caseloads becoming unmanageable in terms of quantity, but that the level of complexity was also increasing. As a result of trying to cope with these challenges they were spending more time managing their caseload, feeling that they had to be always available to the children and families with these complex needs. Participants expressed frustration that when they did show enterprise, and were willing to undertake post-qualifying training, that there was an expectation that they do a substantial amount of it in their own time. Unsurprisingly they were reluctant to do so given that they were already working long hours. To undertake post-qualifying training, they felt would require even more hours engaged in work related activities, possibly at the expense of their family lives:

... One of the biggest barriers is we have to do it [reading] in our own time, because we don't have time in work. I'm just about to start a course at university but I've been told clearly that I will not get the time from work to do it – I'll have to do all the work myself and all in my own time. That makes it hard to do courses and look up research papers. It's difficult. You're not just working 9-5 you're working past that, so people are already giving more than what they are paid for. They have families, they have lives and then to give more in the evenings, at the weekends, is difficult... (participant 13)

Participants not only felt that they didn't have adequate time generally, but that they didn't get enough time to research each discrete factor affecting cases. More specifically, they recognised that each separate case was unique and required a tailored intervention, but that they couldn't afford the time to read the research or attend the training that might conceivably aid them in providing personalised responses:

... it sounds a bad excuse, but if you are sitting with a caseload and your jumping from one case to another case... there is very little time where... you can commit to one full case. You don't have that time to sit down and research it. (participant 10)

... because the procedure and level of working - even in terms of paper work and form filling and meetings, because all that needs to take place. How do you get the time to set aside... for evidencing? (participant 9)

This refrain was consistent through the research. Completing paper work took up a sizable amount of time, decreasing the time they had to acquire knowledge pertinent to their individual cases. However, participants did not begrudge having to do paper work. In fact, they saw this characteristic of their work as a critical element to their safeguarding role. What they did feel, however, was that each case (justifiably) required substantial paper work, but because they had too many

cases in the first place, that the time required to do the paper work encroached significantly into their time to acquire new knowledge.

Discussion

As each participant ‘thought-aloud,’ and were interviewed, they became increasingly aware of the inconsistencies, variability and lack of depth to some of their responses. Participants accepted that having a partially restricted and somewhat insufficient knowledge base, frustrated both their aptitude and aspiration to make fully informed decisions. They sought to explicate the reasons for this, citing the fact that barriers existed, preventing them from having a well-rounded knowledge base. The findings indicate the relevance to social work of wider cultural changes, with Karvinen-Niinikoski (2005) stating ‘The very essence of expertise within a rapidly transforming society tends to be the capability of continuously expanding one’s current competencies’ (p. 10).

Ability and confidence in using theory and research

Lack of confidence in their ability to use theory appropriately was identified as a key barrier to using knowledge. This study provides some evidence for the discussion in the literature about the challenges in identifying and using research knowledge (Beddoe, 2011; Taylor et al., 2015). Social workers are increasingly being required to make decisions based on evidence, effectiveness and to demonstrate quality of care outcomes (Taylor, 2020c; Taylor & Campbell, 2011). To achieve this requires social workers to engage more proactively with evidence gathering activities and be able to decipher research findings and apply them to their practice (including management, training and regulatory) contexts (Alvesson & Sköldbberg, 2018). The findings of this study confirm the discourse about lack of confidence amongst social workers in using theory (Beddoe, 2011; Bolin et al., 2012).

Participants were particularly apprehensive in using theory in official reports, such as those for court, or when being cross examined. Participants also acknowledged that they were apprehensive using theory and research to support their arguments lest their familiarity with the material be found wanting if another professional, such as a legal professional, challenged them or posed counter research to disprove their case in court. These reservations about the use of theory and research resulted in participants avoiding using theory or research in their permanency reports. As a result of their trepidation in this area, participants stated that they tended to revert to using knowledge that they were comfortable and confident using, which in this instance tended to be their knowledge of the law and their own personal practice wisdom. This issue needs to be addressed on a profession-wide and organisational level. The individual practitioner should not be expected to create the whole of the evidential argument ‘from scratch’. Their task should be to apply some consolidated, accepted review of best evidence Mc Elhinney et al. (2019) to the circumstances of the case at hand.

An interesting finding was that social workers need clearer, evidence-based guidance and teaching on the parameters within which particular theories are applicable if these are to be used effectively in decision-making (Ghanem et al., 2019). Stepney and Thompson (2020) argue that applying theory to practice is generally challenging and that practitioners struggle to do so in the overcrowded theoretical landscape. In this congested space, instead of developing well-thought-out, theoretically adroit decisions, practitioners may develop generalist practice knowledge insufficiently adapted to in-depth analysis. An example of the problematic nature of the generalist approach here is the use of attachment theory by some participants to make the permanency decision. Attachment theory, commonly recognised as a popular and relevant theory when making permanency decisions may have been accurate, depending on what aspects of the vignette were foregrounded by participants. However, when applied, different permanency decisions were made. Practitioners, lacking confidence and appropriate training in applying theories opt for what Stepney and Thompson (2020) call the 'kitchen sink approach', which can lead to over-simplistic and variable solutions being offered and an over-reliance on procedure.

As a corollary to this point, it is important that practitioners are enabled to understand how theory and research differ and the different ways in which both can help inform decisions. This would require a rebalancing from the focus on *off-the-shelf general theories*, to a more focused use of specific theories that properly inform the decision-maker. Research has its place here, helping give a more nuanced understanding of risk, efficacy of interventions and the likely outcomes of the decisions, ultimately providing evidence of *what works*.

A nuanced understanding of human feelings, cognition and behaviour is required therefore to apply theories accurately and thoughtfully. The study raises challenges for social work training in terms of whether theory is taught in such a way that it can be too readily misunderstood in terms of its parameters. If the possible interpretations of a theory – as taught – are too varied, then social workers will not be in a good position to appraise appropriate application. Learning to identify the most relevant information when deciding is a sign of an 'expert' decision-maker (Gaeth & Shanteau, 2000); professionals need to be supported in this task through appropriate syntheses of best evidence on key topics.

The limited range of knowledge mentioned by respondents does not reflect the extensive and wide-ranging knowledge base taught on the local social work courses where the vast majority (and probably all) respondents trained. This suggests a limitation in connecting insights and concepts (Hothersall, 2018; Taylor, 2006a, 2006b). In order to enable social workers to make effective use of knowledge, we need to know more about how the professional perceives the knowledge base (Taylor, 2017) and decides how to select and use knowledge in a decision situation (Søbberg et al., 2020; Taylor, 2012a, 2012b). The study findings are somewhat disheartening in terms of the limited explicit use of knowledge to inform practice. However, we must not lose sight of the importance of internalised learning which

can no longer be articulated so easily (Bago & De Neys, 2019; Ghanem et al., 2018).

Training and learning

Participants felt that they were making multiple decisions each day but doing so without explicit training in either the practice or theory of how to make effective evidence-based decisions. Participants wanted to be more knowledgeable, and to make decisions based on a fuller range of knowledge sources. These social workers, all graduates and professionally qualified in social work, wanted further training. It may be that the realities of the work, and the demands of the job in which they are now employed, highlighted more clearly what training topics were required. Post-qualifying training relevant to the realities of the workplace is required (Taylor et al., 2010), informed by our growing knowledge of the transition from student to newly qualified worker (Leonard & O'Connor, 2018; Taylor, 2020b).

For study participants, there was a perceivable fatalistic disposition, manifested in the sentiment, that as a worker you were just expected to 'keep your head down and just get on with the job'. Also, participants felt a sense of being 'thrown in at the deep end', and expected to 'just get on with things'. This left little room, appetite or expectation that they would, should or were entitled to be involved in continuing professional development activities. This fatalistic attitude, operating as it did at the more tacit organisational and personal level, possibly resulted in a more ambivalent attitude towards evidence-based practice that inhibited or prevented participants from actively seeking out learning opportunities that would have enhanced their knowledge. Lunt et al. (2012) recognised that management and organisational support are crucial elements in the development of a knowledgeable workforce, arguing that it is critical that strategies are in place to support this, otherwise learning can be undermined and the workforce's knowledge stagnate. It is possible that the training was on offer, but that participants had not accessed it due to their own orientation towards use of evidence (Wilkinson et al., 2012).

Organisational issues

The complexity of the work and high caseloads was cited as barriers to knowledge acquisition and utilisation. Participants felt as though they were 'jumping from one case to another'. In this pressurised environment, practitioners have little time to pause and read research, or to investigate the micro-level problems of each child or family and possible avenues for intervention and change (Ferguson, 2016). Due to the restricted time available to them to research the individual nuances of discrete cases, participants felt their decision-making capabilities diminished somewhat and that they tended to take a more generalist approach to cases (Ravalier & Boichat, 2018). As in other fields, reality in practice seems to part ways with current theoretical understandings (Hill et al., 2015).

Platt (2006a) recognises this barrier to sound decisions, arguing that resources, funding, organisational support, access to appropriate training and encouragement are required before social workers can be expected to work in an evidence-based manner. Despite working in an environment where there are strategic drivers, albeit fairly recent, towards evidence-based practice (Department of Health for Northern Ireland, 2019; Department of Health, Social Services and Public Safety, 2011; Health and Social Care Board, 2015), respondents in this study still struggled with the lack of organisational support. Employers need to recognise and respond to their responsibilities in terms of creating an evidence-based culture, where continuing professional development is part of the organisational ethos. Employers also need mechanisms in place to ensure that practitioners and employers take on their respective responsibilities in relation to getting evidence into practice (Taylor et al., 2017). To support employers in taking on such responsibilities, the profession needs stronger professional regulatory bodies (with some statutory authority) that can require social workers to undertake some appropriate minimum number of days per year of continuing professional development in order to be licensed to continue practising (e.g. Northern Ireland Social Care Council, 2017), with some influence over employers to shepherd them to support employees in this.

Crucially, what is required is greater clarity about pathways from knowledge to implementation (Hammond et al., 2000; Palinkas & Soydan, 2011), beyond simply completing research reviews (Mc Elhinney et al., 2019) and providing training courses. For busy professionals, one channel worthy of greater exploration is the embedding of knowledge within assessment tools (Taylor, 2012b). In this digital age, we need to investigate further the potential of information technology to bring knowledge to the workplace in readily accessible forms (Taylor, 2006a). Approaches to the integration of knowledge into decision support systems also need to be explored and developed (Geissbuhler & Miller, 2000).

Conclusion

The findings of this Northern Irish study provide some evidence of key barriers to the use of knowledge in social work practice in child welfare. The three themes – use of theory; learning and teaching; and organisational issues – highlight key areas for attention by the profession.

- There are encouraging developments regarding our understanding of aspects of decision-making and risk in social work (McCafferty & Taylor, 2020; Taylor & Whittaker, 2019; Taylor et al., 2017; Whittaker & Taylor, 2018), although we are far from a consolidated field of knowledge at the present time. However, the integration of theoretical understandings with each other and into a framework for making decisions is yet to be developed. A particular challenge is to create an integrated knowledge base to support social workers in particularly challenging situations such as court hearings.

- The need for post-qualifying education and training, as articulated by respondents, is growing slowly but requires greater employer engagement if there is to be real progress. Perhaps greater clarity about the connection between training and standards of practice would provide support for substantial development.
- A model of critical thinking needs to be embedded into the professional supervision of social workers, with the obvious intention of helping social workers make more critically informed, knowledge-based decisions. One option is to use within supervision materials such as Osmo and Landau's (2001) model of 'explicit argumentation,' based on Toulmin (1958) and the Toulmin et al. (1984) structure for making arguments.
- Additionally, practitioners should make greater use of reflective tools such as reflective diaries, process records and critical incident analyses, which Cree and MacAulay (2000) have already found help practitioners move from practice to identifying underpinning knowledge, skills and values. This would hopefully lead practitioners becoming more evidence based in their thinking and practice, which Hood (2016) sees as a critical component of competent practice.
- There is a time factor associated with these developments to improve decision-making which needs to be integrated as an intrinsic part of the social worker's week, giving them the emotional and intellectual space to think and reflect.
- What Ceatha (2018) calls Communities of Practice (CoP) should also be established within social work organisations. CoP involve practitioners coming together to share learning, thus maximising learning in a peer environment and making best use of organisational resources and time.
- Organisational dimensions are a continuing challenge in terms of workloads. However, with the expansion of digital technology, the variety of ways to bring knowledge into practice is also expanding. As a profession – including those social workers in management, training and regulation as well as in practice – we need to engage with the new opportunities so that we can best serve clients, families and society.

Limitations of the study

The sample size was relatively small ($N=17$), although sufficient to give confidence regarding the three themes which are the focus of this paper. The geographic location was limited to one of the five Health and Social Care Trust areas in Northern Ireland. However, social workers in other Trusts will have undertaken the same qualifying training, and general features are similar across the UK.

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Ethics

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ORCID iD

Paul McCafferty  <https://orcid.org/0000-0003-4324-995X>

References

- Alvesson, M., & Sköldberg, K. (2018). *Reflexive methodology: New vistas for qualitative research* (3rd ed.). Sage.
- Bago, B., & De Neys, W. (2019). The smart system 1: Evidence for the intuitive nature of correct responding on the bat-and-ball problem. *Thinking and Reasoning*, 25(3), 257–299. <https://doi.org/10.1080/13546783.2018.1507949>
- Bargh, J. A., & Ferguson, M. J. (2000). Beyond behaviourism: On the automaticity of higher mental processes. *Psychological Bulletin*, 126(6), 925–945. <https://doi.org/10.1037/0033-2909.126.6.925>
- Barlow, J., Fisher, J., & Jones, D. (2012). *Systematic review of models of analysing significant harm*. <https://www.gov.uk/.../systematic-review-of-models-of-analysing-significant-harm>
- Bartoli, L., & Dolan, M. (2014). Decision making in social work with families and children: Developing decision-aids compatible with cognition. *The British Journal of Social Work*, 45(7), 2142–2160. <https://doi.org/10.1093/bjsw/bcu087>
- Baumann, D. J., Dalgleish, L., Fluke, J., & Kern, H. (2011). *The decision-making ecology*. American Humane Association. https://www.researchgate.net/profile/John_Fluke/publication/240245616_The_Decision-Making_Ecology/links/0deec51c4af8feb30e000000.pdf
- Baumann, D. J., Fluke, J. D., Dalgleish, L., & Kern, H. (2014). The decision-making ecology. In A. Shlonsky & R. Benbenishty (Eds), *From evidence to outcomes in child welfare: An international reader* (pp. 24–40). Oxford University Press. <https://doi.org/10.1093/acprof:oso/9780199973729.003.0002>
- Bazeley, P. (2013). *Qualitative data analysis: Practical strategies*. Sage.
- Beddoe, L. (2011). Investing in the future: Social workers talk about research. *British Journal of Social Work*, 41(3), 557–575. <https://doi.org/10.1093/bjsw/bcq138>
- Ben Malek, H., Berna, F., & D'Argembeau, A. (2017). Reconstructing the times of past and future personal events. *Memory*, 25(10), 1402–1411. <https://doi.org/10.1080/09658211.2017.1310251>
- Benbenishty, R., Davidson-Arad, B., López, M., Devaney, J., Spratt, T., Koopmans, C., & Hayes, D. (2015). Decision making in child protection: An international comparative study on maltreatment substantiation, risk assessment and interventions recommendations, and the role of professionals' child welfare attitudes. *Child Abuse and Neglect*, 49, 63–75. <https://doi.org/10.1016/j.chiabu.2015.03.015>
- Bolin, B. L., Lee, K. H., GlenMaye, L. F., & Yoon, D. P. (2012). Impact of research orientation on attitudes toward research of social work students. *Journal of Social Work Education*, 48(2), 223–243. <https://doi.org/10.5175/JSWE.2012.200900120>

- Brandon, M., Bailey, S., Belderson, P., Gardner, R., Sidebotham, P., Dodsworth, J., Warren, C., & Black, J. (2009). *Understanding serious case reviews and their impact: A biennial analysis of serious case reviews 2005–2007*. Department for Education. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/192887/DFE-RB040.pdf
- Breuker, J. A., & Wielinga, B. J. (1987). Use of models in the interpretation of verbal data. In A. L. Kidd (Ed.), *Knowledge acquisition for expert systems: A practical handbook* (pp 17–44). Plenum Press.
- Brighton, H., & Gigerenzer, G. (2012). Homo heuristicus and the bias-variance dilemma. In J. Schulkin (Ed.), *Action, perception and the brain: Adaptation and cephalic expression* (pp. 68–91). Palgrave Macmillan.
- Ceatha, N. (2018). *Using 'Communities of Practice' to deliver continuous professional development for social workers in Ireland*. <https://www.researchgate.net/publication/330181556>
- Cree, V., & Macaulay, C. (Eds) (2000). *Transfer of learning in professional and vocational education*. Routledge.
- Croisdale-Appleby, D. (2014). *Re-visioning social work education*. Department of Health. <https://www.gov.uk/government/publications/social-work-education-review>
- Davidson-Arad, B., & Benbenishty, R. (2008). The role of workers' attitudes and parent and child wishes in child protection workers' assessments and recommendation regarding removal and reunification. *Children and Youth Services Review, 30*(1), 107–121. <https://doi.org/10.1016/j.childyouth.2007.07.003>
- Davidson-Arad, B., Benbenishty, R., Chen, W., Glasser, S., Zur, S., & Lerner-Geva, L. (2010). Distinguishing neglect from abuse and accident: Analysis of the case files of a hospital child protection team in Israel. *Health and Social Care in the Community, 18*(6), 614–623. <https://doi.org/10.1111/j.1365-2524.2010.00934.x>
- Department for Education. (2015a). *Post-qualifying standard: Knowledge and skills statement for child and family practitioners*. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/708704/Postqualifying_standardKSS_for_child_and_family_practitioners.pdf
- Department for Education. (2015b). *Working together to safeguard children*. <https://www.gov.uk/government/publications/working-together-to-safeguard-children-2>
- Department of Health for Northern Ireland. (2019). *A learning and development strategy for social workers and social care workers 2019–2027*. <https://www.health-ni.gov.uk/articles/social-work-strategy>
- Department of Health, Social Services and Public Safety. (2011). *A ten-year strategy for social work in Northern Ireland*. <https://www.dhsspsni.gov.uk/social-work-strategy>
- Earle, T. C. (2004). Thinking aloud about trust: A protocol analysis of trust in risk management. *Risk Analysis, 24*(1), 169–183. <https://doi.org/10.1111/j.0272-4332.2004.00420.x>
- Eiser, J. R. (2001). Attitudes, decisions and perceptions of risk: A social psychological analysis. *Research in Social Problems and Public Policy, 9*, 109–135. [https://doi.org/10.1016/S0196-1152\(01\)80026-0](https://doi.org/10.1016/S0196-1152(01)80026-0)
- Ferguson, H. (2016). What social workers do in performing child protection work: Evidence from research into face-to-face practice. *Child and Family Social Work, 21*(3), 283–294. <https://doi.org/10.1111/cfs.12142>
- Flick, U. (2015). *Introducing research methodology: A beginner's guide to doing a research project* (2nd ed.). Sage.

- Fusch, I., & Ness, L. (2015). Are we there yet? Data saturation in qualitative research. *The Qualitative Report*, 20(9), 1408–1416.
- Gaeth, G. J., & Shanteau, J. (2000). Reducing the influence of irrelevant information on experienced decision makers. In T. Connolly, H. R. Arkes, & K. R. Hammond (Eds), *Judgement and decision making: An interdisciplinary reader* (2nd ed., pp. 304–324). Cambridge University Press.
- Geissbuhler, A., & Miller, R. A. (2000). Computer-assisted clinical decision support. In G. B. Chapman & F. A. Sonnenberg (Eds), *Decision making in health care: Theory, psychology and applications* (pp. 362–385). Cambridge University Press.
- Ghanem, C., Kollar, I., Fischer, F., Lawson, T. R., & Pankofer, S. (2018). How do social work novices and experts solve professional problems? A micro-analysis of epistemic activities and the use of evidence. *European Journal of Social Work*, 21(1), 3–19. <https://doi.org/10.1080/13691457.2016.1255931>
- Ghanem, C., Kollar, I., Pankofer, S., Eckl, M., & Fischer, F. (2019). Does probation officers' reasoning change in the light of scientific evidence? Analyzing the quality of evidence utilisation in social work. *Journal of Evidence-Based Social Work*, 16(4), 423–441. <https://doi.org/10.1080/26408066.2019.1618774>
- Guest, G., Bunce, A., & Johnson, L. (2006). How many interviews are enough? An experiment with data saturation and variability. *Field Methods*, 18(1), 59–82. <https://doi.org/10.1177%2F1525822X05279903>
- Guest, G., MacQueen, K. M., & Namey, E. E. (2012). *Applied thematic analysis*. Sage. <https://doi.org/10.4135/9781483384436>
- Güss, C. D. (2018). What is going through your mind? Thinking aloud as a method in cross-cultural psychology. *Frontiers in Psychology*, 9, 1292–1302. <https://doi.org/10.3389/fpsyg.2018.01292>
- Hammond, K. R., Harvey, L. O. Jr, & Hastie, R. (2000). Making better use of scientific knowledge: Separating truth from justice. In T. Connolly, H. R. Arkes, & K. R. Hammond (Eds), *Judgement and decision making: An interdisciplinary reader* (2nd ed., pp 131–144). Cambridge University Press.
- Health and Social Care Board. (2015). *Social work research and continuous improvement strategy 2015–2020*. <http://www.hscboard.hscni.net/our-work/social-care-and-children/swresearch/>
- Hood, R. (2016). How professionals talk about complex cases: A critical discourse analysis. *Child and Family Social Work*, 21(2), 125–135. <https://doi.org/10.1111/cfs.12122>
- Hothersall, S. J. (2018). Epistemology and social work: Enhancing the integration of theory, practice and research through philosophical pragmatism. *European Journal of Social Work*, 25(2), 1–11. <https://doi.org/10.1080/13691457.2018.1499613>
- Jääskeläinen, R. (2010). Think-aloud protocol. In Y. Gambier & L. Van Doorslaer (Eds), *Handbook of translation studies (Vol.1)*, pp. 371–373). John Benjamins Publishing. <https://doi.org/10.1075/hts.1.thi1>
- Jungk, A., Thull, B., Hoefl, A., & Rau, G., (2000). Evaluation of two new ecological interface approaches for the anesthesia workplace. *Journal of Clinical Monitoring and Computing*, 16, 243–258. <https://doi.org/10.1023/A:1011462726040>
- Karvinen-Niinikoski, S. (2005). Research orientation and expertise in social work education research orientation and expertise – New challenges for social work education. *European Journal of Social Work*, 8(3), 259–271. <https://doi.org/10.1080/13691450500210756>
- Kumar, V. (2017). The think aloud method: Some concerns addressed. *Journal of Modern Languages*, 15(1), 13–25.

- Leonard, K., & O'Connor, L. (2018). Transitioning from 'outside observer' to 'inside player' in social work: Practitioner and student perspectives on developing expertise in decision-making. *Journal of Social Work Practice*, 32(2), 205–218. <https://doi.org/1080/02650533.2018.1438998>
- Lunt, M. F., Ramian, K., Shaw, I., Fouche, C., & Mitchell, F. (2012). Networking practitioner research: Synthesising the state of the 'art'. *European Journal of Social Work*, 15(2), 1–19. <https://doi.org/10.1080/13691457.2010.513964>
- Mc Elhinney, H., Taylor, B. J., & Sinclair, M. (2019). Decision making by health and social care professionals to protect an unborn baby: Systematic narrative review. *Child Care in Practice*. <https://doi.org/10.1080/13575279.2019.1612733>
- McCafferty, P. (2020). "Do I read it? No." Knowledge utilisation in child welfare decisions. *Child Care in Practice*. <https://doi.org/10.1080/13575279.2020.1765149>
- McCafferty, P., & Taylor, B. J. (2020). Editorial: Risk, decision making and assessment in child welfare. *Child Care in Practice*, 26(2), 107–110. <https://doi.org/10.1080/13575279.2019.1703369>
- McDermott, F., Henderson, A., & Quayle, C. (2017). Health social workers sources of knowledge for decision making in practice. *Social Work in Health Care*, 56(9), 794–808. <https://doi.org/10.1080/00981389.2017.1340391>
- Munro, E. (2005). A systems approach to investigating child abuse deaths. *British Journal of Social Work*, 35(4), 531–546. <https://doi.org/10.1093/bjsw/bch194>
- Munro, E. (2008). *Effective child protection* (2nd ed.). Sage.
- Narey, M. (2014). *Making the education of social workers consistently effective*. Department for Education. <https://www.gov.uk/government/publications/making-the-education-of-social-workers-consistently-effective>
- Northern Ireland Social Care Council. (2017). *General guidance for social work registrants Post Registration Training and Learning (PRTL)*. <https://nisc.info/prtl/>
- O'Reilly, M., & Parker, N. (2012). 'Unsatisfactory Saturation': A critical exploration of the notion of saturated sample sizes in qualitative research. *Qualitative Research*, 13(2), 190–197. <https://doi.org/10.1177%2F1468794112446106>
- Osmo, R., & Landau, R. (2001). The need for explicit argumentation in ethical decision-making in social work. *Social Work Education*, 20(4), 483–492. <https://doi.org/10.1080/02615470120064723>
- O'Sullivan, T. (2011). *Decision making in social work* (2nd ed.). Palgrave Macmillan.
- Palinkas, L. A., & Soydan, H. (2011). *Translation and implementation of evidence based practice*. Oxford University Press.
- Patel, V. L., Arocha, J. F., Diermeier, M., How, J., & Mottur-Pilson, C. (2001). Cognitive psychological studies of representation and use of clinical practice guidelines. *International Journal of Medical Informatics*, 63(3), 147–167. [https://doi.org/10.1016/S1386-5056\(01\)00165-4](https://doi.org/10.1016/S1386-5056(01)00165-4)
- Pawson, R. (2003a). *Social care knowledge: Seeing the wood for the trees*. Published as ESRC UK Centre for Evidence-Based Policy and Practice Working Paper 12. <http://www.evidencenetwork.org>
- Pawson, R. (2003b). *Social care knowledge: SCIE like typologies*. Published as ESRC UK Centre for Evidence-Based Policy and Practice Working Paper 13. <http://www.evidencenetwork.org>
- Platt, D. (2006a). Investigation or initial assessment of child concerns? The impact of the refocusing initiative on social work practice. *British Journal of Social Work*, 36(2), 267–281. <https://doi.org/10.1093/bjsw/bch255>

- Platt, D. (2006b). Threshold decisions: How social workers prioritise referrals of child concern. *Child Abuse Review*, 15(1), 4–18. <https://doi.org/10.1002/car.929>
- Ravalier, J., & Boichat, C. (2018). *UK social workers: Working conditions and wellbeing*. Bath Spa University. <https://www.basw.co.uk/resources/uk-social-workers-working-conditions-and-wellbeing-august-2018>
- Reder, P., & Duncan, S. (2004). Making the most of the Victoria Climbié Inquiry Report. *Child Abuse Review*, 13(2), 95–114. <https://doi.org/10.1002/car.834>
- Rubin, A., & Babbie, E. (2016). *Research methods for social work. Empowerment Series* (9th ed.). Cengage Learning.
- Schooler, L., & Hertwig, R. (2005). How forgetting aids heuristic inference. *Psychological Review*, 112(3), 610–28. <https://doi.org/10.1037/0033-295X.112.3.6.610>
- Sheldon, B., & Macdonald, G. (2010). *A textbook of social work*. Routledge.
- Shlonsky, A., & Wagner, D. (2005). The next step: Integrating actuarial risk assessment and clinical judgment into an evidence-based practice framework in CPS case management. *Children and Youth Services Review*, 27(4), 409–427. <https://doi.org/10.1016/j.childyouth.2004.11.007>
- Simon, H. A. (1956). Rational choice and the structure of environments. *Psychological Review*, 63(2), 129–38. <https://doi.org/10.1037/h0042769>
- Søbjerg, L. M., Taylor, B. J., Przeperski, J., Horvat, S., Nouman, H., & Harvey, D. (2020). Using risk-factor statistics in decision making: Prospects and challenges. *European Journal of Social Work*. <https://doi.org/10.1080/13691457.2020.1772728>
- Stepney, P., & Thompson, N. (2020). Isn't it time to start "theorising practice" rather than trying to "apply theory to practice"? Reconsidering our approach to the relationship between theory and practice. *Practice*. <https://doi.org/10.1080/09503153.2020.1773420>
- Taylor, B. J. (1999). Developing partnership between professions in implementing new children's legislation in Northern Ireland. *Journal of Inter-Professional Care*, 13(3), 249–259. <https://doi.org/10.3109/13561829909010368>
- Taylor, B. J. (2006a). Factorial surveys: Using vignettes to study professional judgement. *British Journal of Social Work*, 36(7), 1187–1207. <https://doi.org/10.1093/bjsw/bch345>
- Taylor, B. J. (2006b). Risk management paradigms in health and social services for professional decision making on the long-term care of older people. *British Journal of Social Work*, 36(8), 1411–1429. <https://doi.org/10.1093/bjsw/bch406>
- Taylor, B. J. (2012a). Developing an integrated assessment tool for the health and social care of older people. *British Journal of Social Work*, 42(7), 1293–1314. <https://doi.org/10.1093/bjsw/bcr133>
- Taylor, B. J. (2012b). Models for professional judgement in social work. *European Journal of Social Work*, 15(4), 546–562. <https://doi.org/10.1080/13691457.2012.702310>
- Taylor, B. J. (2017). Heuristics in professional judgement: A psycho-social rationality model. *British Journal of Social Work*, 47(4), 1043–1060. <https://doi.org/10.1093/bjsw/bcw084>
- Taylor, B. J. (2020a). Risk-managing decision-making: A psycho-social rationality model. *British Journal of Social Work*, 00, 1–20. <https://doi.org/10.1093/bjsw/bcaa094>
- Taylor, B. J. (2020b). Learning decision making in child welfare and protection social work. In J. Fluke, M. López, R. Benbenishty, E. J. Knorth, & D. J. Baumann (Eds), *Decision making and judgement in child welfare and protection: Theory, research and practice* (pp. 281–291). Oxford University Press.
- Taylor, B. J. (2020c). Using research in social work. In J. Parker (Ed.) *Introducing social work* (pp. 160–171). Sage.

- Taylor, B. J., & Campbell, B. (2011). Quality, risk and governance: Social Workers' perspectives. *International Journal of Leadership in Public Services [NOW the International Journal of Public Leadership]*, 7(4), 256–272. <https://doi.org/10.1108/17479881111194152>
- Taylor, B. J., Killick, C., Bertotti, T., Enosh, G., Gautschi, J., Hietamäki, J., Sicora, A., & Whittaker, A. (2017). European Social Work Research Association SIG to study decisions, assessment and risk. *Journal of Evidence-Informed Social Work*, 15(1), 82–94. <https://doi.org/10.1080/23761407.2017.1394244>
- Taylor, B. J., Killick, C., & McGlade, A. (2015). *Understanding and using research in social work*. Sage.
- Taylor, B. J., Mullineux, J. C., & Fleming, G. (2010). Partnership, service needs and assessing competence in post qualifying education and training. *Social Work Education: The International Journal*, 29(5), 475–489. <https://doi.org/10.1080/02615470903159117>
- Taylor, B. J., & Whittaker, A. (Eds) (2019). *Professional judgement and decision making in social work: Current issues*. Routledge.
- Thompson, C., & Dowding, D. (2009). *Essential decision making and clinical judgement for nurses*. Elsevier.
- Toulmin, S. E. (1958). *The uses of argument*. Cambridge University Press.
- Toulmin, S. E., Riecke, R., & Janik, A. (1984). *An introduction to reasoning*. Macmillan.
- Veenman, M., Prins, F., & Verheij, J. (2003). Learning styles: Self reports versus thinking-aloud measures. *British Journal of Educational Psychology*, 73(3), 357372. <https://doi.org/10.1348/000709903322275885>
- White, S., & Stancombe, J. (2003). *Clinical judgement in the health and welfare professions*. McGraw-Hill Education.
- Whittaker, A. (2018). How do child-protection practitioners make decisions in real-life situations? Lessons from the psychology of decision making. *The British Journal of Social Work*, 48(7), 1967–1984. <https://doi.org/10.1093/bjsw/bcx145>
- Whittaker, A., & Taylor, B. J. (Eds) (2018). *Risk in social work practice: Current issues*. Routledge.
- Wilkinson, S. A., Hinchliffe, F., Hough, J., & Chang, A. (2012). Baseline evidence-based practice use, knowledge, and attitudes of allied health professionals: A survey to inform staff training and organisational change. *Journal of Allied Health*, 41(4), 177–184.
- Zhang, J. L., & Zhang, D. (2020). Think-aloud protocols. In J. McKinley & H. Rose (Eds) *The Routledge handbook of research methods in applied linguistics* (pp. 302–312). Routledge.