

Critical Thinking and Professional Judgement for Social Work

Fourth Edition

**LYNNE RUTTER AND
KEITH BROWN**

Series Editor Keith Brown



Los Angeles | London | New Delhi
Singapore | Washington DC



Learning Matters
An imprint of SAGE Publications Ltd
1 Oliver's Yard
55 City Road
London EC1Y 1SP

SAGE Publications Inc.
2455 Teller Road
Thousand Oaks, California 91320

SAGE Publications India Pvt Ltd
B 1/I 1 Mohan Cooperative Industrial Area
Mathura Road
New Delhi 110 044

SAGE Publications Asia-Pacific Pte Ltd
3 Church Street
#10-04 Samsung Hub
Singapore 049483

Editor: Kate Wharton
Development editor: Lauren Simpson
Production controller: Chris Marke
Project management: Swales & Willis Ltd,
Exeter, Devon
Marketing manager: Camille Richmond
Cover design: Wendy Scott
Typeset by: C&M Digital (P) Ltd, Chennai, India
Printed in Great Britain by Henry Ling Limited
at The Dorset Press, Dorchester, DT1 1HD



© Lynne Rutter and Keith Brown 2015

First published in 2006
Second edition published in 2008
Third edition published in 2012 (Previously published
as *Critical Thinking for Social Work*.)
Fourth edition published in 2015

Apart from any fair dealing for the purposes of
research or private study, or criticism or review, as
permitted under the Copyright, Designs and Patents
Act, 1988, this publication may be reproduced,
stored or transmitted in any form, or by any
means, only with the prior permission in writing
of the publishers, or in the case of reprographic
reproduction, in accordance with the terms of
licences issued by the Copyright Licensing Agency.
Enquiries concerning reproduction outside those
terms should be sent to the publishers.

Library of Congress Control Number: 2015940820

British Library Cataloguing in Publication data

A catalogue record for this book is available from the
British Library

ISBN 978-1-4739-1918-1
ISBN 978-1-4739-1919-8 (pbk)

At SAGE we take sustainability seriously. Most of our products are printed in the UK using FSC papers and boards.
When we print overseas we ensure sustainable papers are used as measured by the Egmont grading system.
We undertake an annual audit to monitor our sustainability.

Chapter 2

Critical thinking: some general principles

Aspects of critical thinking are apparent when you consider, deliberate, analyse, assess, make decisions or judgements, and discuss or debate issues with others, so most practitioners have plenty of skills and experience to build on. We are, therefore, not aiming to teach or present a set of separate techniques but to start you working with some relevant, generic ideas and principles which can develop your own style of critical thinking further.

We do not intend to cover the full range of critical thinking 'skills' (indeed, this would consider them to be something like a checklist, which is inappropriate for practice) but instead highlight a few basic principles to underpin the process of enhancing the critical aspects of your own learning and development.

What's it all about?

Brookfield (1987) shows that critical thinking is a lived and creative activity, not an academic pastime.

Being a critical thinker involves more than cognitive activities such as logical reasoning or scrutinising arguments for assertions unsupported by empirical evidence. Thinking critically involves our recognising the assumptions underlying our beliefs and behaviours. It means we can give justifications for our ideas and actions. Most important, perhaps, it means we try to judge the rationality of these justifications. We can do this by comparing them to a range of varying interpretations and perspectives.

(Brookfield, 1987, pp13–14)

Thinking critically can therefore result in major shifts in our ways of thinking and the development of reflective scepticism, i.e. when nothing is regarded as a universal truth, or taken on trust any more. Our assumptions and beliefs, the views of others and existing structures all start to be questioned, no matter what their basis or authority. It is powerful and transformative stuff and the challenge can be extremely positive. However, critical thinking can also be threatening, provoke anxiety and create adverse reactions from other people. It is hard work, involving self-doubt and mental blocks, but for many it leads to more creative leaps and insights. If you find yourself being adversely affected by the negative aspects, we advise you to seek support.

Critical thinking should not produce cynics but confident people who can be committed to a point of view that is well informed, rational and supported by relevant and valid material for that situation, and who are also open to other ideas.

How can it be achieved?

Because people vary according to their capacities, abilities and experience, how you think critically will be personal to you. To develop this individuality we need an appropriate theory to provide us with valid and useful goals, methods and outcomes, i.e. an underpinning framework and structure. We propose to initially approach the 'how' in our context by using an established theory of Bailin et al. (1999), who suggest that the critical thinker can be thought of in terms of a set of 'requisite intellectual resources'. These ideas have also been used successfully by Ford et al. (2004, 2005) in their research on criticality with students in social work education, and are explored below.

The intellectual resources for critical thinking are:

- background knowledge;
- critical concepts;
- critical thinking standards;
- strategies;
- habits of mind.

We will look at each of these resources in turn and examine their components, why they are thought to be necessary, and where and how they might be of use. We can also identify the ones we need to develop further.

Background knowledge of the situation in question

Bailin et al. (1999, p290) propose that:

the depth of knowledge, understanding and experience persons have in a particular area of study or practice is a significant determinant of the degree to which they are capable of thinking critically in that area.

In other words, the more you know about a situation and the context in which it sits, the better. This includes existing concepts, beliefs, values and ways of acting, as well as the usual background information which helps clarify the range of available options, e.g. for assessment purposes. However, professional judgement is required to make an informed decision about the actual use of this material. Thus, 'context' plays a significant role in determining what will count as sensible or reasonable application of any standards and principles of critical thinking. This contextually sensitive and moral approach appears well suited to the health and social work arena as it allows for responsible deliberation.

REFLECTION POINT

You don't know what you don't know, so can you ensure that you are not missing something important about a practice situation?

How do you find out more – who and what are your sources?

Possession of critical concepts

In order to deliberate responsibly, and appraise all the material or information we are presented with, we need to understand the ideas and language (the concepts) associated with critical thinking. It is too easy to limit thinking about practice to thinking only of practice – that is, we get wrapped up in the detail and specifics of particular cases and the associated decisions and actions, rather than dealing with general underlying issues. For example, an individual practitioner may reflect on a particular judgement by reviewing the available data and decision trail but not realise that he/she was uncritically following the initial but biased 'team view' on the case. Indeed, in many situations general concerns such as the amount of time we have or associated target-driven pressures all reduce our ability to think as carefully and critically as we would like.

Understanding critical thinking allows us to become more aware of these underlying issues and certain natural human tendencies towards bias that we would normally not even recognise. This type of knowledge does run into areas of psychology and human behaviour, but we do not need to study a new discipline here. For much of the time the key is to be able to dig deep enough (usually with the help of others because we can be extremely delusional at times!) and be honest enough to start to recognise the underlying but hidden beliefs, preconceptions and assumptions we have, or we are working with.

There are a number of cognitive and behavioural biases that are pertinent too. Here are a few examples:

- Anchoring effect – tendency to rely too heavily or 'anchor' on one trait or piece of information when making decisions.
- Bandwagon effect – tendency to do or believe things because others do.
- Confirmation bias – tendency to search or interpret information in a way that confirms one's preconceptions.
- Hindsight bias – noted by the Munro Review (Munro, 2011) – distorts our judgement about the predictability of an adverse outcome. When we look backwards it seems clear which assessments or actions were critical in leading to that outcome and we overestimate how visible the signs of danger were.
- Outcome bias – tendency to judge a decision by its eventual outcome rather than the quality of the decision at the time it was made.
- Pseudo-certainty effect – tendency to make risk-averse choices if the expected outcome is positive, but make risk-seeking choices to avoid negative outcomes.

Critical thinking can be largely concerned with distinguishing and understanding various kinds of argument (e.g. Gibbs and Gambrill, 1999; Cottrell, 2013). Although this can be viewed as an academic and mechanistic exercise, it does allow us to realise how easily we form flawed arguments ourselves and accept those that others present to us. We can become more aware of how arguments work and develop the language to critique them properly rather than just 'feeling' there was something wrong with them.

For this part of the book we will focus on formal, logical arguments initially to show key features of the approach. However, it is fully recognised that informal, practical arguments and reasoning are more likely to form the basis of professional judgement in practice, and align with the complexity, uncertainty and contingent nature of work-based decision-making (Kondrat, 1992; Kinsella and Pitman, 2012). For this reason we will critically consider them fully in the following chapter.

Logical arguments

Before we can appraise a formal logical argument we first need to know which type it is, and then have a full understanding regarding its various parts to make appropriate distinctions and evaluate it. Logical arguments are used to suggest the truth or demonstrate the falsity of a particular claim via a formal reasoning process, giving us a viable means for knowing the truth or arriving at sound beliefs. Logical arguments are composed of propositions that are capable of being either true or false, and can serve as the objects of belief – they are the building blocks. The propositions used as reasons/evidence within the argument become the argument's premises. They are the grounds for accepting the argument and its conclusion, which is also the final proposition. There is a movement from one or more propositions used as premises to the proposition argued for as the conclusion.

- This bookcase is wood – proposition/premise.
- Wood is a strong material – proposition/premise.
- This bookcase will support my heavy books – final proposition/conclusion.

The premises must be true and 'accepted', and their relevance to each other and the conclusion must be adequately supported. Premises will differ in their acceptability and credibility, and therefore in their sufficiency to support the conclusion. Any proposition also already carries with it other accepted positions, assumptions or 'givens' that are not always made explicit but which need to be critically examined. In the example above, the words 'strong' and 'heavy' are relative and open to individual interpretation – we will each have a set of established ideas about the types and relative properties of wood that there are.

As the final proposition is arrived at on the basis of one or more other propositions already accepted or known to be true, it is the connection or inference between them which is important in logical argument. The question is whether the truth of the conclusion follows from that of the premises. The problem is that inference, by its nature, is not explicit and needs to be examined. In the example above the key inference would be that the wood the bookshelf is made out of is the right strength for the weight of the books.

Types of logical argument: deductive, inductive and abductive

Deductive arguments

The appropriate logical sequence for a deductive argument moves from the general to the specific, as seen in the above example. A valid argument here is defined as one where the argument's structure actually works as a sequence, even though the propositions (as premises or conclusion) may be false. A sound argument is a valid argument whose premises are all true, so it always arrives at a true conclusion. Be careful not to confuse valid arguments with sound arguments.

Example 1: valid and sound deductive argument. The premises are true, the conclusion is true and the argument's structure is correct.

Premise: All pilots are people who know how to fly airplanes.

Premise: John is a pilot.

Conclusion: John knows how to fly airplanes.

Example 2: valid but unsound deductive argument. One of the premises is false, so the conclusion is false. However, if the premises were all true, then the conclusion would be true because the logical structure works as a sequence and so the argument itself remains a valid one.

Premise: All tigers are blue.

Premise: The animal outside my window is a tiger.

Conclusion: The tiger outside my window is blue.

It is therefore important to note the fact that just because a deductive argument is valid, it does not imply that its conclusion holds true. It is therefore important to always check the accuracy of the premises presented within any argument.

Example 3: invalid deductive argument. The premises are all true but the conclusion actually ends up being false and so the argument is invalid.

Premise: Fish can swim.

Premise: My father can swim.

Conclusion: My father is a fish.

How does this happen? It is usually because of the hidden inferences and assumptions we mentioned above. This refers to anything that is taken for granted, e.g. facts, ideas or beliefs which underlie the argument. For a deductive argument to have a justifiable conclusion (be sound as well as valid) not only must its premises be true, but the inferences which underlie them must also be reasonable and justifiable. As we said, a deductive argument implies from the general to the specific. This is where the problem occurs because other factors in a general statement might be present but not acknowledged. Our example implied that anything that swims must be a fish. We could have worded the proposition as 'only fish can swim' and then it would have been a valid argument at least, although obviously unsound.

Let's look at a more relevant example (from Gibbs and Gambrill, 1999):

- Premise:* John has an attention-deficit hyperactivity disorder.
- Premise:* This disorder decreases academic performance.
- Premise:* Drug X reduces hyperactivity in school children.
- Conclusion:* If we prescribe drug X for John, his academic performance will improve.

REFLECTION POINT

What are the implications here?

ACTIVITY 2.1

Write out a deductive argument using premises and conclusions from a practice example.

What are the inferences or assumptions?

COMMENT

Doing this should allow you to see how much an argument relies on its inferences to make the links between the premises. As a deductive argument works from very general premises to more specific ones, it relies on a large number of inferences and assumptions which are naturally implicit. They obviously need to be made explicit, and examined and questioned further to see if they are correct and relevant. In our example, what has been proven in relation to ADHD and its impact on academic performance? Has drug X been tested with children of John's age?

Inductive arguments

An inductive argument usually argues and infers from the specific to the general, i.e. in the opposite way to a deductive argument. An inductive argument is one where the premises provide some evidence for the truth of the conclusion. Inductive arguments are not valid or invalid. This means that if the premises are true in an inductive argument, it is probable that the conclusion is true, but it might not be. Inductive reasoning consists of implying from the properties of a sample to the properties of a population as a whole and works with the notion of probabilities.

For example, suppose we have a container containing 1,000 beads. Some of the beads are red and some of the beads are blue. If we take a sample of 100 beads from the container and 50 of them are red and 50 of them are blue, then we could infer inductively that half the beads in the container are red and half are blue. In all probability we are likely to be about right, but we could also be very wrong. Inductive reasoning

also depends on the similarity of the sample and the population. The more similar the sample is to the population as a whole, the more reliable will be the inductive implication. No inductive implication is perfect and any of them can fail. So, even though the premises are true, the conclusion might be false. Nonetheless, a good inductive implication will give us reason to believe that the conclusion is probably true.

Many general medical and social work theories are based upon observations of very specific experiments with samples. In our deductive example, one of the premises was based on such a theory: 'Drug X reduces hyperactivity in school children.' However, as we know, experiments cannot take into account all circumstances or situations (i.e. the evidence is incomplete). To see if this was an acceptable inductive conclusion in its own right, it would be necessary to see whether the experiments with drug X were tested with a similar sample of children to John and in relation to academic performance.

In an historical context, Bowlby's findings (1951,1969) suggested that infants who were separated from their mothers at an early age had behavioural and emotional difficulties later. This was used to argue the case against mothers working outside the home. This conclusion no doubt suited the economic conditions at the time; however, the data was based on children in very extreme institutionalised situations and one could argue that these were not 'typical' children. So the conclusion may not have been justified even though the research was accurate. Research usually progresses in this way with later researchers questioning aspects such as whether the sample was representative or whether the research contained assumptions invisible at the time (Cottrell, 2003).

ACTIVITY 2.2

Do you know of any theories that have been based on inductive reasoning?

Why are they considered valid?

COMMENT

The validity of any theory is considered in more detail later in this chapter, but any inductively based theory would need to have undergone further research to show its ongoing relevance and use for a wider population from the one where it was generated.

Abductive arguments

Another type of logic is called abductive reasoning where a person notes and/or observes a surprising circumstance and then develops the hypothesis that makes that circumstance a matter of course. It works from a description of something to a hypothesis that accounts for the reliable data within that description and seeks to explain relevant evidence. This 'good guessing' is based on what limited data is available at a given time, but it can be extended to encompass additional detailed testing and rigorous observation.

For example, you could get up in the morning and see that your lawn is very wet. If it rained last night, it would be unsurprising that the lawn is wet. So by abductive reasoning the possibility that it rained last night is a reasonable hypothesis. Another condition is also necessary here – the hypothesis should not just be sufficient but also the most economical or simplest explanation. So if you reasoned instead that aliens landed and sprayed your lawn with something that looked wet, that would not be an economical explanation and be classed as unsound abductive reasoning. Simplification and economy in an argument is a good rule of thumb, but we could also ask whether in a complicated medical or socially complex situation it is sometimes also necessary to look for a less obvious explanation.

Knowledge of critical thinking standards

Once the concepts (the ideas and language) of critical thinking are understood, we need standards that will enable us to deliberate and judge effectively and in a sound manner. Standards of critical analysis and appraisal are specific for each area of activity, i.e. standards for criticising an argument will be different from those used for criticising a piece of research.

Critical thinking standards do not always guide a thinker on how to apply them. Their nature makes it necessary for the critical thinker to exercise judgement in interpreting them and determining what they require in any particular case – which is how it should be if you think about it! The way in which you exercise this judgement and interpret the relevant standards gives you important material for discussion. The worst way to use them would be as unexamined tick-box lists. Developing such judgement is like learning a language – you don't follow an exact set of rules in speech, but you can act in a way the standards suggest (e.g. using unambiguous words and short sentences) and recognise when your thinking fulfils these relevant standards (e.g. other people understanding you, rules of grammar).

This is obviously a huge subject, so we have initially collated below the generalised standards relevant for the critical appraisal of deductive and inductive arguments. Further standards and principles for other aspects of professional practice, e.g. critically thinking about practical arguments, knowledge and reflection, are considered in later chapters. All these standards and principles obviously need to be kept under review to ensure they are appropriate for each particular context.

REFLECTION POINT

Where do you hear or make 'logical arguments' in the workplace?

Which standards or guiding principles do you apply to critically appraise them?

Have you come across any flawed reasoning or assumptions recently? How did you recognise and/or question them?

Critical analysis of deductive arguments (from Gibbs and Gambrill, 1999)

- Does the conclusion have at least one premise in support of it?
- Are all the premises relevant to the truth of the conclusion? A premise is only acceptable if it:
 - is a matter of undisputed common knowledge;
 - can be adequately defended;
 - is the conclusion of another sound argument;
 - is an incontrovertible eyewitness testimony;
 - is an incontrovertible report from an expert in the field;
 - is different from the conclusion itself;
 - does not contradict the evidence, a well-established claim, a reliable source or other premises in the same argument;
 - is not self-contradictory, linguistically confusing or unintelligible.
- When viewed together, do the premises constitute sufficient grounds for the truth of the conclusion? (i.e. strong enough in number, weight and kind – small and/or unrepresentative samples, or anecdotal evidence would be considered weak).
- Do the premises provide an effective rebuttal to all reasonable challenges to the argument? This is a good criterion for distinguishing mediocre arguments, because many people ignore or hide contrary evidence. Good arguers examine counter-arguments as well as compatible ones.

A deductive argument may be unsound because:

- there may be something wrong with its logical structure, e.g. when the conclusion does not follow on logically from the reasons preceding it and the inferences are weak;
- it contains 'false' (irrelevant, unacceptable, weak) premises;
- it bases conclusions on too little evidence (generalising from incomplete information) or overlooks alternative conclusions.

Critical analysis of inductive arguments

- The size of the sample should not be too small to support the conclusion.
- The sample used should not be relevantly different from the population as a whole.
- Any analogies between samples and population must be valid. (For example, it may be argued that since A has property P, so also B must have property P. The analogy fails when the two objects, A and B, are different in a way which affects whether they both have property P.)
- Important evidence which would undermine an inductive argument should not be excluded from consideration. The requirement that all relevant information be included is called the 'principle of total evidence'.

Knowledge of strategies

People discover or devise key strategies and procedures for guiding and critically checking their performance in a variety of thinking tasks, e.g. making lists of pros and cons for decision-making; using examples for clarifying terms; useful rules of thumb; discussing issues with a knowledgeable person. Specific strategies tend to be more helpful than those designed to apply in all cases and each of us will have our own preferred methods and techniques. What is most helpful is when they are made more explicit and shared among people struggling with the same issue.

ACTIVITY 2.3

List some strategies or tips you already have for practice, e.g. for making decisions, problem-solving; and for learning, e.g. reading, studying.

These ideas are great to share in groups – how can you create an opportunity to share ideas on your course or programme – over coffee, via e-mail?

COMMENT

Informal methods can be very successful ways to share ideas and ways of working with colleagues and team members, but it can also be productive to create a time within a more formal gathering so that more people can get involved.

Habits of mind

As Bailin et al. (1999, p294) point out, having all the intellectual resources necessary for critical thinking does not make anyone a critical thinker. The final resource is probably the most important of them all. We need to have certain commitments, attitudes or habits (e.g. respect for reason and truth, a truly open rather than a defensive attitude) and recognise the value of critical thinking in fostering true belief and responsible judgement/action as well. These attributes are closely tied up with our ethics and values. In Wilkins and Boahen's view (2013, p6) all social work practitioners need to *develop an 'analytical mindset' that pervades their practice in all areas*. Health and social work, with their interdisciplinary natures and inherent value system guiding judgement and action, are obviously well placed for fostering such habits of mind, but it is easy to become complacent and believe they are occurring automatically. In addition, of course, the ability of an organisation and a team to create conducive learning cultures aimed at encouraging and supporting such habits of mind is crucial here, a point we will return to in the following chapter. Chapter 7 looks more closely at how routine practice easily becomes uncritical, defensive and even arrogant within certain work environments.

In practice we need knowledge about the subject at hand, self-knowledge (an honest recognition of how we think and reason, and the biases we are prone to) plus a

range of values, attitudes and dispositions related to personal humility, human rights and the dignity and intrinsic worth of all human beings. These attributes underpin the ability to practise critically and encourage the inherent requirements of social work: openness, questioning and responsibility.

REFLECTION POINT

Which specific professional values do you think are relevant to your critical thinking?

Review

We have chosen to use one set of critical thinking ideas to develop in this section but you will probably find other authors' work echoing this material. For example, Smith (1992) identifies three key factors in critical thinking: knowledge, authority and a willingness to doubt. 'Knowledge' fits exactly with our first intellectual resource of background knowledge; 'authority' would involve the use of our critical concepts, standards and strategies; and 'a willingness to doubt' would be our habit of mind.

As we can see, critical thinking cannot be thought of as something that finds perfect solutions. Rather, the skills and abilities of critical thinking allow the best quality decisions or actions possible for the situations we encounter. Our holistic view advocates not just the application of critical thinking principles and techniques, but a more developed understanding of how our thinking operates in our day-to-day environments and the dangers we need to become more aware of.

We have only focused on more formal arguments in this chapter to initially demonstrate the usage of these ideas. However, your own learning will provide many opportunities to use these critical thinking principles in undertaking professional judgement, using new knowledge in practice, in reflecting on learning and practice and when writing. We will now explore each of these areas in turn in the following chapters and develop the notion of critical thinking within them.

FURTHER READING



Brookfield, S (1987) *Developing critical thinkers*. Milton Keynes: Open University Press.

A general but insightful look at becoming a critical person.

Fisher, A (2001) *Critical thinking: An introduction*. Cambridge: Cambridge University Press.

An excellent introduction for specific critical thinking concepts and techniques.

Jones-Devitt, S and Smith, L (2007) *Critical thinking in health and social care*. London: Sage.

A range of different approaches can be found in this text that help explore a wider view of critical thinking.

Moon, J (2008) *Critical thinking: An exploration of theory and practice*. London: Routledge.

This book provides a series of ideas from the literature as well as very practical advice.

Wilkins, D and Boahen, G (2013) *Critical analysis skills for social workers*. Maidenhead: Open University Press/McGraw Hill Education.

This text offers a step-by-step model for developing an analytical mindset.

WEBSITES



The Critical Thinking Community: www.criticalthinking.org

The Foundation and Center for Critical Thinking aim to improve education in US colleges, universities and primary through to secondary schools.