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RESEARCH REPORT

Clinical intuition in mental health care: A discussion and focus groups

Cilia L.M. Witteman*, Nanon L. Spaanjaars and Alexander A. Aarts

Diagnostic Decision Making, Behavioural Science Institute, Radboud University Nijmegen, PO Box 9104, 6500 HE Nijmegen, The Netherlands

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Clinical intuition in mental health care has been written off as a mysterious kind of ability to 'see through' clients, something that clinicians who favour evidence-based practice should have nothing to do with. We propose another understanding of clinical intuition. Similar to other types of professional intuition, we take it to refer to automatic responses that are based on knowledge acquired through significant, explicit learning from textbooks and in clinical practice. We think clinical intuition understood in this way deserves rehabilitation as a creditable source of information for clinicians. We propose an argument for our viewpoint, and as a start of this rehabilitation process, we describe a demarcation of what clinical intuition is and how it is used according to professionals in the mental health domain themselves. We conclude that in actual practice, clinicians combine the empirical approach to their clients with the use of their professional intuitions. Both intuition and analysis have their flaws and merits. Explaining when clinical intuition might be helpful to trainee clinical psychologists and counsellors would be a useful complement rather than an antonym of teaching empirically based decision processes.

Keywords: clinical intuition; experience; guidelines; reasoning process; training; evidence-based practice

In mental health care, the so-called 'clinical method', in which information is combined and processed in the clinician's head, has been portrayed as something that should be banned from clinical practice, since it does much more harm than good (Dawes, 1994; Garb, 2005). Instead, clinicians should use the 'actuarial method', in which conclusions are based solely on empirically established relations between data and the condition or event of interest (Dawes, Faust, & Meehl, 1989; Grove, Zald, Lebow, Snitz, & Nelson, 2000; Meehl, 1954). These authors and other advocates of the empirical approach to clinical practice have written off intuition as a mysterious kind of ability to see through clients, something that clinicians who favour evidence-based practice should have nothing to do with. In this light, an attempt to vindicate clinicians' intuitions might seem inappropriate (cf. e.g. Ubel & Loewenstein, 1997). Also, clinicians who prefer intuition over rationality tend to favour evidence-based treatment less (Gaudiano, Brown, & Miller, 2011), and thus go against current practice guidelines. However, it would be a waste of clinical

*Corresponding author. Email: C.Witteman@socsci.ru.nl

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experience if the intuitions that result from it were to be left unexploited. In the following, we propose another understanding of clinical intuition, one that allows it to have a worthy place in clinical care.

We do so for a number of reasons. Maybe the most important reason is that even with today's focus on evidence-based clinical work, in actual practice clinicians always combine the actuarial approach with the clinical method (Harding, 2004; Kleinmuntz, 1990). Clinicians are uneasy with an exclusive focus on rational, evidence-based decision making (cf. e.g. Welsh & Lyons, 2001) and they all use their intuitions to some extent, in different stages of the clinical process (Garland, Kruse, & Aarons, 2003; Jeffrey & Stone Fish, 2011). Something that all clinicians use cannot be set aside as unworthy without further investigation of its function. We think that its ubiquitous use makes it important to bring clinical intuition back into the open, to define it and, together with clinicians, to scrutinise its use and to be aware of both its flaws and its merits (cf. Jeffrey & Stone Fish, 2011).

Intuition

It is generally agreed upon that intuition is based on automatic processes which rely on knowledge structures that are acquired by (different kinds of) learning (Glöckner & Witteman, 2010a). Intuitive processes operate at least partially without peoples' awareness and result in feelings, signals or interpretations. In order to better discriminate the many meanings assigned to the term intuition, we think it is useful to distinguish different types, depending on how it is learned and retrieved (Glöckner & Witteman, 2010b; cf. also Hogarth, 2010). Four types are specified: associative intuition, which is learned through reinforced associations and retrieved as a feeling; matching intuition, based on acquired exemplars and retrieved by comparison; accumulative intuition, where memories are linked to current information in an automatic overall evaluation; and constructive intuition, where memories and current information are used to automatically construct a consistent mental representation.

All types of intuition are highly context-sensitive and specific to a particular domain, because they are acquired through domain-relevant experience. Intuitions are typically expressed as approximate judgements, and often experienced in the form of feelings instead of words (Hogarth, 2001). Intuition addresses, integrates and makes sense of multiple complex pieces of information. It is the translation of repeated experience, which is unconsciously linked together to form a pattern, into action (Klein, 2003). With experience, reasoning processes become less explicit and knowledge becomes 'encapsulated' through learning (Schmidt & Boshuizen, 1992).

Intuitive clinical decision making

Clinical intuition is sometimes portrayed as a special kind of intuition, as direct clinical insight. Yet clinicians' intuition is not fundamentally different from other types of professional intuition; it too is often derived from significant, dedicated, explicit learning (Klein, 2003; Sadler-Smith, 2008). It is sometimes correct and sometimes flawed; but so is its rival, analysis (Kahneman & Klein, 2009). If learning takes place in representative situations and with adequate feedback (Hogarth, 2005; Kahneman, 2003), then clinical intuitions may be correct. Conversely, when the

situations in which intuitions are learned are not representative or when feedback during learning is not adequate, the intuitions that are developed may be incorrect. Of course, such optimal learning conditions may sometimes be difficult to arrange in actual clinical practice. It requires sufficient resources in time and money to organise outcome monitoring and feedback on practices, which is often an aspiration rather than a fact (Gilbody, House, & Sheldon, 2002; Knapp et al., 2006; Torrey et al., 2001).

Independent of whether there is feedback or not and if so, of what quality, the higher the levels of experience, the more clinicians perform the clinical decision task using encapsulated, routine cognitive processes (Rikers, Schmidt, & Boshuizen, 2000; Witteman & Van den Bercken, 2007). They develop their professional intuition through dedicated clinical practice, and they will use it with future clients (Abernathy & Hamm, 1995). During practice, the characteristics of typical cases are unconsciously linked together to form a pattern, which is then accessible for quick application to a similar case (Bhugra, Easter, Mallaris, & Gupta, 2011). Correct or incorrect, the use of intuitions increases with increasing experience and the use of explicit reasoning decreases. This is not so black and white, and judgements and decisions are usually based on a mix of different types of intuition and analytically based reasons (Abernathy & Hamm, 1995). Judges rely more on the one or the other depending on their experience but also for instance depending on their own decision making style (e.g. Epstein, 2010), and on the context and the task (Hammond, 1996).

One very functional use of experience-based intuition is the role it can play in the generation of diagnostic hypotheses (Speich, 1997). Also, if clinicians would make their intuitions explicit to themselves, and then indeed use them as hypotheses to be tested, this might be seen as a workable compromise between the clinical method of using their head and the actuarial method of using empirical results, with the best of both. It would not result in a waste of clinical experience, and neither would it result in clinicians blindly following empirical guidelines. If clinicians make their intuitions explicit to themselves and others this may also result in opportunities for useful feedback about their validity. In the study we report below, we aimed to find out whether clinicians are indeed able to make their use of intuitions explicit and to indicate when it is sensible to rely on it. This is an important question, since intuitions by their very nature are implicit rather than explicit yet they need to be made explicit to be trainable to novices and to be worthwhile in clinical work.

A qualitative study of clinical intuition

We were interested in how practising clinicians think about the phenomenon of intuition: do they recognise it as an ingredient in their work with clients, do they use it often, and do they trust it? To answer these questions, we asked clinicians some direct questions, and subsequently held a focus-group interview to further explore what clinicians believe and feel about clinical intuition (Rabiee, 2004; cf. also Kitzinger, 1995). Addressing the question with this method, we circumvent the problem that people may not know how they think (cf. Nisbett & Wilson, 1977). We do not ask clinicians to report if they think intuitively while they think about a client, but we ask them to give us their views on using their intuition in their practice.

Method

Procedure

In a meeting with psychotherapists during a day of in-service training, we raised the topic of clinical intuition. Participants were asked to take 10 min to fill in a questionnaire with three open questions: 'What is, in your view, clinical intuition?', 'When does intuition play a role in your diagnostic process?', and 'How do you use your intuition?' We also included the Diagnostic Decision Making (DDM) questionnaire (Appendix). This questionnaire contains a list of 18 situations about DSM use and intuition for which participants were asked to state whether they *never* (1) to *always* (5) applied to them, for example: 'When you diagnose a client, do you look up the diagnostic criteria in the DSM?', or 'Do you have thoughts about 'prototypical' clients?' Two items (7 and 9) captured matching intuition, two items (11 and 13) were about constructive intuition, one item (15) captured accumulative intuition and one item (17) associative intuition. Finally, participants were asked for their demographic data (gender, age and experience) and for consent to use their answers.

Then we performed a focus-group interview, splitting up the participants in two groups. Each group had a discussion leader who started the sessions and who made sure that the discussions remained focused. Participants already knew each other, and they were comfortable enough with each other to engage in discussion (cf. Rabiee, 2004). The entire sessions were audiotaped. After 75 min the groups rejoined, and the conclusions were exchanged and summarised.

Data analysis

The answers to the open questionnaire items were summarised and grouped by two coders independently. The answers to the 18 closed DDM questionnaire items were tabulated, and Spearman correlations between items were calculated.

The audiotapes of the focus groups were typed out verbatim. We then cut the transcriptions into separate statements, and thematically analysed all these statements (cf. Braun & Clarke, 2006). We started out by placing each statement under one of the general themes: 'What is intuition', 'When does it play a role', and 'How is it used'. We then developed sub-categories within each theme.

Participants

A total of 20 psychotherapists in training participated, one of whom did not consent to using the answers to the questionnaire. There were 17 women and two men, with an average age of 37.4 years (SD = 9.2; minimum 26.6, maximum 53.5). Being allowed into the psychotherapist training programme in the Netherlands requires at least an academic Masters degree in clinical psychology, as well as additional knowledge obtained in practice or in post-Master education (such as a certificate in cognitive behaviour therapy). Participants were in their third year of training (out of four) and had an average of 7.6 years of clinical experience (SD = 5.1; minimum 1.9, maximum 25). The two focus groups were organised into two equal sized groups of 10 with similar age ranges, work settings and gender.

Results

DDM questionnaire

Given the small number of participants, only some very basic analyses were performed. Based on conceptual analysis, the questions were organised in three sub-scales, labelled 'DSM use' (questions 1–6), 'Intuition' (questions 7, 9, 11, 13, 15 and 17), and 'Self-monitoring' or explicitly checking with the other information (8, 10, 12, 14, 16 and 18). The three sub-scales did not inter-correlate. For the DSM use sub-scale alpha was 0.65, which increased to 0.78 when item 2 was deleted; for the Intuition sub-scale alpha was 0.66, which increased to 0.72 when item 15 was deleted; and for the Self-monitoring sub-scale alpha was 0.71.

Participants generally, but not significantly, scored higher on Self-monitoring than on Intuition, $M = 22.21$ (SD = 3.17) versus 19.47 (SD = 2.63), with DSM use in between, $M = 21.42$ (SD = 3.42).

Although we had a small group of 19 participants only, the results not only showed that the sub-scales capture different clinical decision making styles, they also showed that people were able to self-assess that they used the four types of intuition (cf. above).

Open questions and focus groups

The answers to the three open questions ('What is clinical intuition?', 'When does it play a role?', and 'How is it used?') on the questionnaire and the focus group results are presented together under their category headers.

What is clinical intuition? One participant wrote that intuition was 'a combination of experience, from your practice and from life, with textbook knowledge'. This was the only answer that did not include the word 'feeling'. The other participants mentioned only feelings, for example 'using your feeling as an instrument', or a combination of feeling with experience, as in 'gauge how clients make me feel, and use my experience from earlier treatments' or with knowledge, e.g. 'combining factual data with how the client makes me feel'.

Feelings also figured importantly in definitions of clinical intuition given in the focus groups. They were mentioned by themselves, for example in 'I then immediately felt that there must be something more'. They were also referred to as gut feelings, as a feeling of alarm: 'Something is wrong here', as the sense that there is something more than meets the eye, or as a physical sensation of tension.

People talked about three types of sources of intuition: (1) observations, 'What you see'; (2) what people call up in you, 'When they elicit a certain behaviour in you', 'A felt sense'; and (3) training and experiences, 'A frame developed in the course of years'.

These sources lead to a strong feeling of knowing, 'It feels as if now I know it', via implicit processes, that is: via non-conscious, automatic, quick and pre-verbal processes that cannot be explained: 'You don't have a cognitive explanation for it but you do feel it'.

When does intuition play a role? Clinicians wrote about three moments at which intuition plays a role: (1) directly at the first contact; (2) when in doubt or uncertain; and (3) always.

In the focus groups, we also heard that for some people clinical intuition was always present: 'It remains present during diagnosis and in treatment, all the time'. We could distinguish two further categories: it plays a role with certain characteristics of the situation, and given certain characteristics of the clinician and the client.

Characteristics of the situation included when reading the written information, in the first session: 'The first impression, first contact', and with time pressure, 'When the decision to hospitalise or not needs to be made very quickly'. They also included situations where intuition would need to be followed, such as when treatment does not progress according to plan. These two characteristics, at the beginning and when in doubt, match the answers to the questionnaire.

In the focus groups, participants further talked about characteristics of the clinician and the client; aspects that were not mentioned in the questionnaires. The use of intuition was thought to depend on the background of the clinician: 'You use it more with client-centred therapy than with behaviour therapy' and on whether or not they dare trust their intuition: 'It depends on whether you feel safe going with your feeling at that moment', as well as on the relationship with the client and her/his strengths.

How is intuition used? Clinicians wrote that they would discuss their intuitions during group supervision sessions with colleagues. They would also talk about them with their clients. They would combine them with other information, and they would treat them as hypotheses that need to be tested.

The focus groups confirmed these types of use. Clinicians talked about discussing their intuitions with colleagues in a team, or with their clients: 'When you feel it, you talk about it with your client'. They also exchanged that they would only use them in combination with other information such as the diagnostic criteria. They would test their intuitions, treating them as hypotheses, looking for justifications or refutations of these initial feelings.

Clinicians further mentioned that there were situations in which they would not directly do anything with their intuitions, initially just keeping them in the back of their minds or in their notes for later use.

Other remarks made in the focus groups

Learning

In both focus groups, participants discussed whether intuition could be learned or not. One person said it could not, but most people disagreed: it can be developed, not so much at college as in clinical practice and through supervision, especially in client-centred training. More specifically, 'You can learn to take it seriously', to use it properly and to trust it, for example by looking back at videotapes of your own sessions with a supervisor.

Risks of intuition

Participants remarked that an initial intuition may lead to tunnel vision, projection and/or confirmation bias. Sometimes intuitions may lead to the wrong conclusion, especially with personality disorders which are not so easy to classify: 'I was

convinced he had a narcissistic personality disorder', which may need to be corrected in intervision or by explicitly checking the DSM criteria. Another interesting point that participants discussed is that when the therapist has strong feelings or when there is counter-transference, it requires professional distance to separate what comes from the clients and what from themselves, and 'You always have yourself with you'.

Discussion and conclusions

From the questionnaire and the focus groups, we conclude that mental health clinicians are able to make explicit that and how they make use of the four types of intuition. They recognise its flaws, for example that it may lead to tunnel vision, and also its merits, for example that it helps them when they are in doubt. Importantly, they all realised that intuition leads to hypotheses, and that these intuitive hypotheses need to be tested.

Clinicians often admit that it is difficult to follow the thorough procedure of observing the complaints as objectively as possible, inducing the potential problems and their initiating and maintaining factors, deriving hypotheses, and testing these hypotheses with valid assessment instruments, as prescribed in guidelines (De Bruyn, Ruijssenaars, Pameijer, & Van Aarle, 2003). They inevitably use their experience-based intuitions in the process, even though there is ample evidence that empirically based methods lead to less error (Grove et al., 2000). They justify this attitude with reasons such as that numbers dehumanise patients, that formula never catch the whole person (Dawes et al., 1989), or that every patient is different. This controversy between the prescription to use empirically based methods and the actual use of intuitive processes (Garb, 2005) may only be theoretical. It is not a matter of either-or, we found that clinicians say that in actual practice they combine the two. This need not be a problem. From a (scientific) theoretical perspective, empirical methods and evidence-based practice are the norm which should be adhered to. Yet intuition has also been shown to have its assets (see e.g. Klein, 2003), for example in suggesting and guiding diagnoses (Srivastava & Grube, 2009). As long as clinicians realise that these intuitive hypotheses need to be tested, and our participants testified that they do, these assets might be exploited rather than denied.

Seeing that intuition has its merits in clinical work, pointing this out to trainee clinical psychologists and counsellors would be a useful complement rather than an antonym of teaching empirically based diagnostic decision processes. Currently intuition is not discussed at all in (Dutch) clinical training programmes. Since we again found that clinicians always use it (cf. Bhugra et al., 2011; Jeffrey & Stone Fish, 2011), discussing its merits and perils during training would be a good starting point. A next step would be to train clinical intuition. There are no programmes available for this specific purpose, but we might learn from Klein (2003), who has developed a training programme to improve intuitive decision making in general. He recognises the value of intuition yet is at the same time aware of its pitfalls, most notably its imprecision and its inability to solve computationally complex problems. His training programme may help pinpoint the circumstances conducive to the development of clinical intuition. Klein, for example, proposes imagining a scenario in which things go wrong, and then to generate reasons for such failures as a way to sharpen one's intuition. This suggests that intuition is based on, among other things, being alert to danger signs, something our focus group participants also mentioned.

The limitations of our study are that the number of participants was limited, and that we had a rather homogeneous group of psychotherapists in training. Generalising to all mental health clinicians can therefore only be done with caution. Also, although we were aware of the risk of biasing the participants in the focus groups with our beliefs and we guarded against influencing their responses, we may of course implicitly have suggested what we would see as desirable answers.

The question whether clinical intuition can actually be trained in novices is a quite important topic for future studies. Future studies could also try to trace actual intuitive processes instead of only asking clinicians to reflect on them. Uncovering implicit intuitive processes is a challenging line of research, for which methods described in a recent handbook (Glöckner & Witteman, 2010a) may be employed (e.g. Spaanjaars & Witteman, submitted). The development of intuition with experience is in itself also an interesting topic for further study, with other explicit methods (think aloud, asking to justify decisions) as well as implicit approaches (physiological measures, implicit association tasks).

We conclude that intuitive clinical decision making in mental health care should be recognised as a complement of evidence-based decision processes. It can be trained and, if trained well, it can be valuable – it can help generate hypotheses about the diagnosis. Intuition is part of an experienced clinician's toolbox, and they are able to make it explicit. It is an important element of the clinical expertise that, as the APA Presidential Task Force on Evidence-Based Practice (2006) tells us, needs to be integrated with the best available research in the context of patient characteristics, culture and preferences.

Notes on contributors

Cilia L.M. Witteman is full professor in Psychodiagnostics and Diagnostic Decision Making at the Behavioural Science Institute, Radboud University Nijmegen, The Netherlands. She has published articles in the areas of diagnostic decision making processes of psychologists and doctors, and clinical rationality versus intuition. Her main research focus is the clinical decision maker.

Nanon L. Spaanjaars is junior researcher in the Department of Clinical Psychology, Behavioural Science Institute, at the Radboud University Nijmegen. She is a graduate of the Research Master Behavioural Science, and also completed the graduate programme of Clinical Psychology.

Alexander A. Aarts is a graduate from the Research Master Behavioural Science at the Radboud University Nijmegen.

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Appendix

Diagnostic Decision Making (DDM) questionnaire.

NB: All items are answered on a 1 to 5 scale, with 1 = *never* and 5 = *always*.

When you diagnose a client:

(1) Do you look up the diagnostic criteria in the DSM?
(2) Do you use diagnostic criteria that you remember?
(3) Do you check if the information about the client matches the criteria in the DSM?
(4) Do you check if there are sufficient criteria present to decide on the particular DSM diagnosis?
(5) Do you read (parts of) the information which is given with the different psychological disorders in the DSM under the heading 'differential diagnosis'?
(6) Do you check if (parts of) this information under the heading 'differential diagnosis' match with the information you have about the client?

During the diagnostic task you may think about clients that you have seen in the past or that you have read descriptions or reports about.

(7) Do you ever think about clients that you have seen in the past or have read descriptions or reports about?
(8) Do you then explicitly check if (parts of) these thoughts match with the information you have about the client?

During the diagnostic task you may think of a client who is 'prototypical' for a specific disorder with the associated interventions.

(9) Do you ever think of 'prototypical' clients?
(10) Do you explicitly check if (parts of) these thoughts match with the information you have about the client?

During the diagnostic task you may form an overall picture or interpretation or explanation of the client's symptoms.

(11) Do you ever form an overall picture or interpretation or explanation of your clients' symptoms?
(12) Do you explicitly check if this overall picture or interpretation or explanation matches with the information you have about the clients?
(13) Do you ever know directly what diagnosis or intervention is appropriate, without knowing how you know that?
(14) Do you then explicitly check if this 'direct knowing' matches with the information you have about the client?

While reading the information about a client, you may suddenly know what the problem is. It feels as if this conclusion results from a non-conscious summation of the information you read.

(15) Do you ever find that while reading some information you suddenly know what the problem is?
(16) Do you explicitly check if the rest of the information about the client matches with this conclusion?

You may feel that a diagnosis is correct or incorrect, without clear reasons.

(17) Do you ever have such a feeling about a diagnosis?
(18) Do you explicitly check if the information about the client justifies that feeling?