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Examination of the Role of Implicit Clinical Judgments During the Mental Health Intake

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Abstract

We examined the characteristics of therapists' implicit clinical judgments during the mental health intake. Following the intake session with new clients, we conducted 129 semistructured interviews with 47 therapists. We found that 82% of therapists and 75% of interviews included reference to implicit clinical judgments. Therapists referred to these judgments as a cognitive process which relies on knowledge acquired through past clinical experiences and is primarily based on nonverbal cues and affective communication. Therapists used implicit processes when evaluating how to facilitate a good working alliance, what diagnostic information to collect and how to decide on diagnosis. Majority of therapists described elements of good rapport, such as being listened to, as central for positive outcome of the intake. We concluded that implicit clinical judgments were vital to allow therapists to integrate the plethora of information from different channels of communication that they collect during the intake.

Keywords

content analysis; decision making; health care; interviews; mental health and illness

The mental health intake is the first point of contact between clients and therapists. The intake includes a clinical interview and poses great challenges to therapists because they are faced with accomplishing multiple goals, including establishing diagnosis, facilitating rapport, providing psychoeducational tools and planning treatment (Hilsenroth & Cromer, 2007; Nakash, Rosen, & Alegria, 2009; Turner, Hersen, & Heiser, 2003). To meet these competing demands, therapists must make rapid decisions on how to use the limited time allocated for the intake.

It remains unclear how clinicians organize and weigh the complex information presented to them during the intake to make clinical decisions. Models of information processing in social cognition suggested a role for two complementary systems (Epstein, 1998). One system is slower, highly flexible and operates largely through controlled and explicit

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processes, including deliberate reasoning; whereas the other system is faster, highly efficient and operates largely through automatic, holistic, nonverbal and implicit processes, such as intuition. The latter plays an important role in many clinical decisions in general, and in the field of mental health in particular (Chaffey, Unsworth, & Fossey, 2010; Chaffey, Unsworth, & Fossey, 2012; Hall, 2002). Studies on the use of implicit judgments in clinical practice, specifically among occupational therapists, showed that such decisions are immediate and accessed without a conscious awareness of reasoning. Moreover, they are informed by tacit knowledge and involve an affective component (Benner & Tanner, 1987; Mattingly & Fleming, 1994; Schön, 1983).

The investigation of the reliability and validity of clinical judgment dates back to Paul Meehl's landmark book on clinical versus actuarial prediction (1954). Meehl concluded that systematic assessment is superior to clinical judgment, because of its greater degree of reliability. This is because the latter is often based on informal, observational and implicit data, whereas statistical prediction is often based on structured interview schedules that involve direct questions. Since its publication, other researchers argued similarly and suggested that such explicit procedures are considered to improve clinical utility by increasing the reliability of the clinical diagnosis and the predictive validity of the assessment as well as reduce bias in clinical decision-making (Dawes, Faust, & Meehl, 1989; Stickle & Weems, 2006).

Other researchers have questioned the utility of relying solely on direct questions because they can substantially be affected by biases related to insight and motivation. Explicit and direct forms of collecting information are particularly disputable in assessing personality disorders which require judgments that clients might lack the training and objectivity to make (Westen, 1997; Westen & Weinberger, 2004). In addition, explicit information processing might also hinder the assessment of implicit motivations that represent enduring personality patterns that are not consciously accessible to the client (McClelland, Koestner, & Weinberger, 1989). Indeed, findings from past studies have shown that clinicians do not tend to rely on explicit and direct questions. Instead, clinicians use diagnostic procedures that rely more on clients' narratives describing themselves and their social history. They also tend to utilize observations of the client's nonverbal communication and in-session interaction with the therapist (Westen, 1997).

Implicit clinical procedures were particularly useful for assessing personality structure and pathology as well as for evaluating a wider range of interpersonal problems (e.g., chronic fear of abandonment) and personality conflicts (e.g., chronically feeling guilty) for which clients report seeking treatment. In contrast, a more explicit mode of assessment might be better suited in evaluating depressive and anxiety disorders that are more consciously available to the client (Westen & Arkowitz-Westen, 1998).

Although concerns still loom as to the validity and accuracy of clinicians' judgments, a recent study provided support for the concordance between these judgments and the clients' self-reported history and functional status (DeFife, Drill, Nakash, & Westen, 2010). Other researchers also suggested that implicit processes or "deliberation without attention" provide an advantage for making decisions in complex matters in which a large amount of

information can be integrated into an evaluative summary (Dijksterhuis, Bos, Nordgren, & Van Baaren, 2006).

Implicit processes are ubiquitous and are essential for many clinical judgments (Benner & Tanner, 1987; Chaffey et al., 2010; Hall, 2002; Westen & Weinberger, 2004). These processes are highly efficient and operate largely through automatic, holistic, and nonverbal processes (e.g., Epstein, 1998). The implicitness of the judgment includes both the lack of awareness of factors that influence the decision as well as the processes that guide the integration of the factors influencing the behavior (Bodenhausen & Todd, 2010).

Despite its importance, little empirical investigation exists on the nature of implicit clinical judgments in the context of psychotherapy. This is partly a result of the complexity of studying implicit processes, which are not consciously accessible to the individual.

Traditionally, implicit processes in clinical judgment were linked to the study of heuristics. Heuristics are rules of thumb that allow one to make quick judgments (Tversky & Kahneman, 1974). In many situations, using heuristics might result in accurate predictions and reflect a highly adaptive and efficient response to decision-making in the real world (Chase, Hertwig, & Gigerenzer, 1998). Nonetheless, more commonly, heuristics have been viewed as a source of bias and errors in clinical judgments (Kahneman, 2003).

The view of implicit judgments as synonymous to heuristics has been challenged by researchers who proposed that these judgments rely on mental representations that reflect prior experiences and knowledge (Betsch, 2008; Hogarth, 2001; Simon, 1992). According to the naturalistic decision-making approach implicit clinical judgments can be defined as a cognitive process where a decision is made fast and automatically without conscious awareness (Betsch, 2008). This thinking process is acquired through associative learning, and it becomes the basis for judgments through holistic evaluations which are often affectively laden. (Dane & Pratt, 2007; Epstein, 1994; Lieberman, 2000).

In the current qualitative study we aimed to characterize implicit clinical judgments during the mental health intake in psychiatric settings. We focused on the investigation of the prevalence and content of these judgments during the assessment process. In addition, we examined the relevance of these implicit processes to elements that contribute to positive outcome of the intake from therapists' perspective. We used inductive qualitative research design involving the use of grounded theory methods and emergent conceptual frameworks (Bryant & Charmaz, 2010; Glaser & Strauss, 1967; Stahl et al., 2009). Our research questions included the following: (a) what are the characteristics of implicit clinical judgment? (b) what is the content of implicit clinical judgments during the intake? and (c) what elements that are based primarily on implicit processes promote positive outcomes of the intake?

Methods

Participants

We report on data from the Patient-Provider Encounter Study (PPES, Alegria et al., 2008). The PPES utilized a convenience sample of 47 therapists and 129 clients who participated in

mental health intakes. We collected data in eight safety net outpatient clinics in the Northeastern United States offering mental health and substance abuse services to a culturally diverse and socioeconomically disadvantaged client population.

We recruited the therapist participants at the clinics through introductory informational meetings. We recruited client participants' through direct person-to-person solicitation as they presented for the intake visit. Client inclusion criteria were adults aged 18–65 years who did not require interpreter services. We excluded people whom the providers identified as psychotic or suicidal, or those who lacked the capacity to consent (total of three clients). To ensure the diversity of the sample, we invited therapists to participate only up to five times in the current study (with five different intake visits). The problems that clients presented were diverse and included familial and other interpersonal problems as well as major Axis I symptomatology (e.g., depression, anxiety).

Intake visits ranged between 20–70 minutes, with average length of visit lasting 59 min (SD=25 min). There were no structured protocols for conducting the intakes in any of the participating clinics. All aspects of the study were approved by the appropriate Institutional Ethics Committees and data collection was in compliance with all human subject protocols at all participating clinics.

Out of the 47 providers who participated in the study, 26% were psychologists, 28% psychiatrists, 38% social workers and the remaining were nurses, with the majority of clinicians (70%) having more than five years of clinical practice. Approximately 53% of providers were self-identified as non-Latino White, 36% as Latino, 9% as non-Latino Black (African American or Afro-Caribbean), and 2% as Asian.

Out of the 129 clients who participated in the study, the majority were women (60%). Latinos represented 39% of study participants, with approximately 50% self-identifying as non-Latino White, 11% as African American or Afro-Caribbean. Almost two-thirds of the sample (59%) had completed high school and 45% were employed. Approximately 64% reported a personal income of less than \$15,000 per year, and approximately 50% were on Medicaid.

Procedure

We conducted semistructured in-depth interviews face to face with therapists immediately following the mental health intake they conducted with their client. These in-depth interviews were based on principles of cognitive task analysis methods to investigate the cues and strategies that expert decision makers apply (Crandall, Klein, & Hoffman, 2006). The semistructured interview protocol included a number of scripted questions and a list of suggested probes designed to explore therapists' experiences and evaluation process during the intake (Hill et al., 2005), and lasted approximately 30 minutes.

Interviews included questions about therapists' understanding of the client's major problem, their evaluation process, their rapport with the client, and their views of the role of sociocultural factors in the client's presenting problem. Trained research assistants who received weekly supervision by a medical ethnography expert conducted all interviews. We

audiotaped, transcribed and edited these interviews to remove identifiers. Finally, therapists completed two open ended questions about what they found to be most and least helpful for their client during the intake visit.

Analyses

We employed a phenomenological approach (Giorgi, 1997) to explore how individuals construct and make meaning of their actions in concrete social situations. In line with the phenomenological approach, we performed a cross-case thematic content analysis identifying and coding major themes in therapists' accounts of implicit clinical judgments. We applied thematic analysis according to the recommendations made by Braun and Clarke (2006) on how to implement it to psychology. Analyses were conducted using NVivo 7 (Qualitative Solutions Research International Pty Ltd, 1998). The research team who coded and analyzed the data included five members: Two postbaccalaureate Latin-American women; one masters' student in social work, also Latin-American woman; one research associate in clinical psychology, who was an Israeli woman; and one professor in clinical psychology, who was a Latin-American woman. In this analysis, we included all 129 interviews from the study.

The qualitative analysis involved a series of steps. First, the research team developed a codebook which included eight predetermined conceptual categories based on guidelines of the semistructured interviews. These categories represented "buckets" such that they included general rather than specific themes (e.g., therapist evaluation process; references to cultural background; systemic factors; client-therapist interaction). Two members of the team coded each interview to establish reliability. We organized all the information in the data corpus under these major thematic categories. In addition, we allowed data extracts to be placed under more than one category depending on their relevance to the content of the thematic category.

To conduct the analyses for this article, two members of the research team who are the authors of the article analyzed the "therapists' evaluation process" category. This conceptual category included all excerpts describing evaluations that therapists made during the intake as well as their account of the process by which they made these evaluations.

We performed the analysis in two stages. We first performed open coding (Corbin & Strauss, 2008), by independently reading the accounts line by line to identify codes. Afterward, we grouped and labeled key categories. In the second stage, we separately reread the accounts to perform axial coding as a means to identify the relationship among categories and to organize them into themes. We integrated the information in each theme to draw a coherent representation of the material. Throughout the analysis process the team met on a weekly basis to discuss coding challenges as well as disagreements. When disagreement arose, the research team attempted to identify the source of the discrepancy and coded sections were reviewed again until consensus was reached (Corbin & Strauss, 2008).

For the purpose of coding, implicit clinical judgment was defined as a cognitive process in which a judgment was made without the explicit knowledge of how it was made (Hall, 2002). To facilitate the identification of references to implicit judgments coders identified

key phrases that are synonyms of the word “implicit” (Betsch, 2008; Dodge Rea, 2001; Simpson & Weiner, 2009) such as: “I had a sense”; “it was my impression”; “it felt like”; “it was an intuition”; “visceral reaction”; “unconscious”; “gut feeling.”

Qualitative analysis of the therapists’ responses to the open ended questions about what was most and least helpful during the intake followed identical procedures to the ones described above. We identified major themes related to elements that promoted positive outcome of the intake across the therapists’ answers.

Results

References to implicit clinical judgments were prevalent in a majority of the interviews. Out of the 47 therapists who participated in the study, 82% included references to implicit clinical judgments in their interviews, with more than 75% of all interviews including references to such judgments (e.g., 38 of the 47 therapists and 97 interviews of the 129 included at least one reference to implicit clinical judgment). In total, there were 263 different references to implicit clinical judgment in the data set.

We first present the major themes that emerged from the interviews to address our research questions: (a) the characteristics of implicit clinical judgments, and (b) the content of implicit clinical judgments during the intake. Supportive text is included to illustrate the main findings (Table 1). We then present major themes related to elements that promote positive outcome of the intake from the therapist’s perspective as depicted in the responses to the open ended questions of what was most and least helpful during the intake.

Characteristics of Implicit Clinical Judgment

Therapists often referred to implicit clinical judgment as a cognitive process which relies on their past clinical experience and is primarily based on nonverbal cues and affective information. This tendency is apparent in the following quote:

My gut, intuition, experience. ... I just really trust my intuitive sense. It’s just a knowing, if it looks like a duck, walks like a duck, sounds like a duck, it’s just after a while you get closer and closer recalling these things. It’s just experience, my clinical experience.

Nonverbal cues, such as eye contact, body posture, and tone of voice, were particularly important for implicit clinical judgments. For example, a therapist described her implicit clinical appraisal by mentioning that her client was not interested in talk therapy and would not return to care. She based this judgment primarily on the client’s nonverbal communication:

I didn’t get the impression that he has any interest in talk therapy for what he’s describing as anxiety. He didn’t identify that he’d ever done that in the past until I directly asked him if he had ever seen anyone for counseling, then he said, “Oh yeah I did that too,” sort of describing the past, and when he said it he turned away and didn’t make eye contact and just sort of said that and then when I was trying to

describe how he could access it, he was sort of getting up putting on his coat, wasn't really listening to that part of it.

In the following example the therapist described how he decided to change his interviewing style to "freestyle" that he implicitly believed would enhance rapport with the client based on the client's affective and nonverbal communication:

I don't know when or why I decided to change the interview style. I can just remember more the softening of her face and more affect in what she was talking about and that were the clues for me to explore more openly. ... It felt right to let her freestyle a little bit more.

In addition, therapists described the importance of the evaluation of their own affective reactions toward their clients during the interview for the way they implicitly integrated the information presented to them:

I am always taking in information. A lot of it is what I am seeing, my own awareness. If I am having a strong reaction to the patient - and sometimes this happens - sometimes people make me feel a certain way, I check in with that. So I am taking in information from them and me and trying to use that in addition to the content. They are communicating with me without words and I am integrating that along with the content they are giving me.

Content of Implicit Clinical Judgment During the Intake

Therapists described using implicit processes in a variety of judgments, including ones related to how to evaluate and develop a good working alliance with the client, as well as in clinical diagnostic evaluations. Many therapists indicated using implicit judgments in the evaluation of the quality of the working alliance that helped them assess whether they felt "connected" to the client. For example, a therapist described what affected her impression that she had developed "good rapport" with her client. She based the appraisal primarily on her affective connection with the client: "It is more like a visceral reaction. I felt that she could cry and smile during the interview. I felt like I was connected with what she felt."

Similarly, another therapist described the strategies that guided his attempts to develop a good working alliance with the client. He based these strategies primarily on implicit observations of nonverbal cues as well as on his own attunement to the client's affective state:

I don't remember details about a particular incident. But I remember the flow of the interview. What seemed to be most identifiable was my attempt to read nonverbal cues: eye contact, body language, tone of voice, inflection, and the stream of consciousness.

Therapists also reported using implicit processes in judgments regarding whether to trust the client, which was directly related to the quality of the rapport. For example, a therapist described how intuition helped her decide whether to trust the client's report:

I think what helped was my intuition that the information that was being provided by the client was honest. ... That's not always the case, but I think that in this case it was clear enough that the information he was providing was accurate and honest.

Alternatively, other therapists, like in the example below, described how they could not trust their clients' report, though they could not explain how they reached this judgment: "My feeling was that he was being dishonest. It was really hard and that doesn't happen very often and I don't know why it happened but it did, and that was my impression."

Therapists described their continuous struggle in judging which diagnostic information to collect, and how much detail should they encourage the client to provide. For example, a therapist did not ask the client about a recent loss because he felt that the client did not want to talk about it:

I can't remember what my response to his follow up question was, but I got the sense that perhaps he was not wanting to go into it in great detail. ... It was just this feeling that he didn't want to talk about it. I never did get all the information I needed about it.

Specifically, many therapists described utilizing implicit processes also when applying the information they collected to make diagnostic impressions. This was particularly prevalent in cases where the explicit symptomatic information conflicted with the implicit observational data as depicted in the following example:

I decided that he was psychotic and wanted to get him on meds for that. I was puzzled about the fact that he didn't have any of the negative attributes of schizophrenia so maybe he had major depression with psychosis. I was struck that he had an incredible ability to connect with me as an interviewer which didn't go with the schizophrenia. He was incredibly trusting and unhostile. Sometimes when you interview an early onset psychotic person they are extremely angry. And he didn't have any hostility. So that was a little puzzling. Diagnostically, I was thinking I would rather him have major depression. He will get better quicker.

Implicit clinical evaluations were particularly prevalent in diagnostic assessment of depression, such as what information to collect about their clients' depressive state:

When she was talking about how depressive she felt, I wanted more specific details because I wanted to enquire about self-injurious behaviors. ... I didn't know why I felt I had to ask about it, it was more my intuition which was saying that she was feeling so bad.

In addition, therapists used implicit processes to decide about the severity of the client's depressive symptomatology as manifested in the following example: "She seemed to me that she was somewhat depressed, I don't know, maybe it was more my intuition of me thinking that she is more depressed."

Many therapists used implicit processes to determine whether to omit the assessment of psychotic symptoms. Although the therapists could not explain their intuitive impressions, they decided not to ask the client directly about such symptoms even in the case of a client who had a history of psychotic symptoms:

I could have asked about symptoms of psychosis, that she once had, but I didn't ask anything about that. Because I had felt that she didn't have any symptoms. I assumed that she didn't have them, I don't know why.

Some therapists described making implicit judgments about whether to proceed with safety assessment of their clients (i.e., suicidality and homicidality). For example, a therapist described her intuitive decision not to ask the client about risk factors:

It was a decision that I gave priority to in that moment because the intuitive impression I got from her was that it did not seem like there was a risk factor. She seemed like someone who is trustworthy in the sense of being responsible.

Intervention Techniques That Promote Positive Outcome of the Intake

A majority of therapists described that allowing their clients to talk and their ability to listen to them and understand them were most helpful for their clients. Therapists also emphasized the importance of talking about feelings and validating their clients' feelings. Therapists also mentioned that assisting their clients in reaching out for appropriate services and providing psychoeducation about treatment options, particularly about medication, were most helpful for their clients. Therapists' characteristics such as being empathic, nonjudgmental and knowledgeable were also mentioned as important. Few therapists mentioned that completing the diagnostic evaluation and conducting a thorough assessment was the most important. Finally, some therapists mentioned the limited time and systemic constraints as least helpful (Table 2).

Discussion

Our findings are congruent with other studies where researchers have suggested that implicit clinical judgments are cognitive processes based on past clinical experience which rely heavily on affective components (Benner & Tanner, 1987; Betsch, 2008; Chaffey et al., 2010; Kahneman & Klein, 2009). Our findings demonstrate that these processes are prevalent in mental health care and pertinent as early as the initial intake encounter.

Therapists tended to integrate the information the client reported and their observational assessment of how he or she reported it. They primarily relied on affective-relational aspects (e.g., affective reaction, tone of voice, eye contact, body posture), rather than on the content of the information reported (see also Westen, 1997). Therapists in this study also described that the prevalent affect of the client as well as feelings evoked within the therapists themselves during the interaction with the client played a key role in their implicit clinical judgments. Processing vast amount of information delivered through multiple communication channels during the intake is challenging. When faced with such challenges, therapists might use cognitive shortcuts that can prove economical under the time pressure and resource constraints they encounter in their daily work.

Our findings suggest that therapists tend to use implicit processes when making judgments about the quality of the working alliance and the client's trustworthiness. Working alliance serves as the single best predictor of positive clinical outcomes of psychotherapy (Horvath, 2000; Horvath & Luborsky, 1993; Zuroff & Blatt, 2006). Our results suggest that good

working alliance is critical to positive outcomes and client satisfaction as early as the initial intake session. A majority of therapists indicated that the most important elements for positive outcome of the intake were related to good working alliance, such as being able to talk and be listened to and feeling understood. It appears that most clinicians successfully gage this goal by employing implicit clinical judgments (see also Hilsenroth & Cromer, 2007).

Structured interviews based on explicit questioning might challenge the existence of open communication between clients and therapists and therefore might hinder the development of a good working alliance and the development of trust (Hilsenroth & Cromer, 2007). Alternative, less structured models of conducting the intake, based more on observational and implicit clinical judgments, view it as an opportunity to give clients the physical and emotional space to “tell their story” and emphasize the role of good listening and responsiveness on the part of the therapist in facilitating good rapport (Clark & Mishler, 1992).

In spite of that, as indicated by our findings many therapists also utilized implicit processes to guide their diagnostic impressions. Therapists reported using implicit processes when collecting information mainly about depressive and psychotic symptoms as well as about a general risk assessment. It is plausible that clinicians extrapolate from their past clinical experience of treating depression, which is more prevalent in their practice. Similarly, deciding on the presence of positive symptoms or psychosis as well as a general risk assessment are usually part of every intake therapists conduct and therefore common in their clinical practice. This extrapolation might serve as a shortcut in making judgments that are based on expertise gained through past clinical experience.

Although it can be time efficient, such shortcuts might rely on assumptions that are not necessarily accurate and might result in what Kahneman and Klein (2009) coined as the illusion of validity (i.e., overconfidence that providers feel). This illusion can affect their tendency to use more implicit processes in diagnostic evaluations rather explicit assessments. These findings are congruent with previous research which has documented that the problem of missing information during the intake visit (i.e., therapists do not collect important diagnostic information) is particularly salient among clients diagnosed with mood disorders (Alegria et al., 2008).

The utility of implicit clinical judgment during the mental health intake is unclear. Thus, whether the recognized patterns that therapists identify are valid and lead to improved clinical judgments or to biased appraisals remains an open question. Our findings suggest that using implicit processes in judgments related to facilitating good working alliance serve as an efficient strategy to connect with the client and promote positive outcome of the intake (see also, Hilsenroth & Cromer, 2007). Nevertheless, many therapists reported not completing an explicit assessment of certain symptoms or disorders as a result of these implicit appraisals. Thus, their sole reliance on implicit clinical judgment might hinder their ability to detect symptoms central to diagnosis, risk assessment and lead to incorrect diagnostic decisions based in part on missing information they did not collect (Alegria et al., 2008).

Using implicit clinical judgments during the mental health intake seems essential in that they allow therapists to integrate multiple sources of information which rely heavily on nonverbal and affective information (Benner & Tanner, 1987; Chaffey et al., 2010). As such, it can be an important tool in making judgments about how to relate to a certain client and how to facilitate rapport. Clinical training programs should include guidance that is aimed to promote clinicians attentiveness to their client's nonverbal and affective communication as well as skills in observing the relational style of the client with the therapist during the intake. Nonetheless, sole reliance on implicit clinical judgment might hinder therapist's ability to detect symptoms central to Axis I diagnosis and risk assessment. Raising attention to these different applications of implicit clinical judgment in training programs can improve mastery and positive utilization of such important and prevalent processes in the clinical encounter.

This study has several limitations. First, the study of implicit clinical judgment is challenging because it is based on an investigation of an unconscious process. Thus, for example, one might argue that our interviews did not capture all the implicit judgments made by therapists because they were not explicitly accessible to them. It is important to note that in being aware of these methodological challenges, we utilized in-depth interviewing techniques based on the methods of cognitive task analysis to uncover the evaluation process.

In addition, because of the naturalistic nature of this study and high diversity of the participants we were not able to investigate the effect of gender and training on the nature of the implicit decision making process. Future, longitudinal studies that include more participants can shed light on these important questions. Notably, the high prevalence of implicit clinical judgments among the participating clinicians most of whom were in midpoint career, is congruent with previous research documenting that experts compared with novices appear to have an intuitive understanding of a situation and the appropriate actions they should take. These providers, therefore tend to use tacit knowledge and intuition more frequently (Dreyfus & Dreyfus, 1996).

Last, the study did not include direct assessment of the efficacy of implicit clinical judgments. Future studies should include methodological means to distinguish when implicit judgments efficiently lead to correct diagnostic evaluations and when they lead to incorrect and possibly biased judgments. Such studies can investigate the diagnostic accuracy when it is based implicit clinical judgments and compare it to a gold standard of using structured diagnostic interviews. Corroborating information from clients' and other informants' assessment of the intake visit and its outcomes can provide means to validate the efficacy of these judgments. Other important clinical outcomes such as the quality of the therapeutic alliance and clinician's empathy should also be investigated to establish the utility of these processes. Finally, future studies should continue to investigate the processes that underlie implicit judgments.

Finding ways to raise awareness of implicit clinical judgments and improve them is critical for mental health care. Our findings suggest that raising awareness about the effect of the therapist's affective response toward his or her client as well as the need to directly question

his or her diagnostic assumptions based on nonverbal communication might serve as a good starting point.

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References

- Alegria M, Nakash O, Lapatin S, Oddo V, Gao S, Lin J, & Normand S-L (2008). How missing information in diagnosis can lead to disparities in the clinical encounter. *Journal of Public Health Management and Practice*, 14, Suppl S26–35. doi:10.1097/01.PHH.0000338384.82436.0d [PubMed: 18843234]
- Benner P, & Tanner C (1987). How expert nurses use intuition. *The American Journal of Nursing*, 87(1), 23–24. Retrieved from http://journals.lww.com/ajnonline/Citation/1987/01000/How_Expert_Nurses_Use_Intuition.12.aspx [PubMed: 3642979]
- Betsch T (2008). The nature of intuition and its neglect in research on judgment and decision making. In Plessner H, Betsch C, & Betsch T (Eds.), *Intuition in judgment and decision making*. Mahwah, NJ: Lawrence Erlbaum Associates Publishers.
- Bodenhausen GV, & Todd AR (2010). Automatic aspects of judgment and decision making. In Gawronski B & Pane BK (Eds.), *Handbook of implicit social cognition: Measurement, theory, and applications*. NY: The Guilford Press Retrieved from <http://social-cognition.uni-koeln.de/scc4/documents/HBISC.pdf>
- Braun V, & Clarke V (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101. doi:10.1191/1478088706qp063oa
- Bryant A, & Charmaz K (2010). *The Sage handbook of grounded theory*. London: Sage Publications Ltd.
- Chaffey L, Unsworth C, & Fossey E (2010). A grounded theory of intuition among occupational therapists in mental health practice. *The British Journal of Occupational Therapy*, 73(7), 300–308. doi:10.4276/030802210X12759925544308
- Chaffey L, Unsworth C, & Fossey E (2012). Relationship between intuition and emotional intelligence in occupational therapists in mental health practice. *The American Journal of Occupational Therapy*: official publication of the American Occupational Therapy Association, 66(1), 88–96. doi:10.5014/ajot.2012.001693 [PubMed: 22389943]
- Chase VM, Hertwig R, & Gigerenzer G (1998). Visions of rationality. *Trends in Cognitive Sciences*, 2(6), 206–214. doi:10.1016/S1364-6613(98)01179-6 [PubMed: 21227174]

- Clark JA, & Mishler EG (1992). Attending to patients' stories: Reframing the clinical task. *Sociology of Health and Illness*, 14(3), 345–372. Retrieved from <http://onlinelibrary.wiley.com/doi/10.1111/1467-9566.ep11357498/abstract>
- Corbin JM, & Strauss AL (2008). *Basics of qualitative research: Techniques and procedures for developing grounded theory*. London: Sage Publications, Inc.
- Crandall B, Klein G, & Hoffman RR (2006). *Working Minds: A practitioner's handbook of cognitive task analysis*. Cambridge, MA: MIT Press.
- Dane E, & Pratt MG (2007). Exploring intuition and its role in managerial decision making. *The Academy of Management Review*, 32(1), 33–54.
- Dawes RM, Faust D, & Meehl PE (1989). Clinical versus actuarial judgment. *Science*, 243(4899), 1668–1674. doi:10.1126/science.2648573 [PubMed: 2648573]
- DeFife JA, Drill R, Nakash O, & Westen D (2010). Agreement between clinician and patient ratings of adaptive functioning and developmental history. *American Journal of Psychiatry*, 167(12), 1472–1478. doi:10.1176/appi.ajp.2010.09101489 [PubMed: 20634365]
- Dijksterhuis A, Bos MW, Nordgren LF, & Van Baaren RB (2006). On making the right choice: The deliberation-without-attention effect. *Science*, 311(5763), 1005–1007. doi:10.1126/science.1121629 [PubMed: 16484496]
- Dodge Rea B (2001). Finding our balance: The investigation and clinical application of intuition. *Psychotherapy: Theory, Research, Practice, Training*, 38(1), 97–106. doi:10.1037/0033-3204.38.1.97
- Dreyfus H, & Dreyfus S (1996). The relationship of theory and practice in the acquisition of skill In Benner P, Tanner C, & Chesla C (Eds.), *Expertise in nursing practice: Caring, clinical judgment, and ethics* (pp. 29–47). New York: Springer.
- Epstein S (1994). Integration of the cognitive and the psychodynamic unconscious. *American Psychologist*, 49(8), 709–724. doi:10.1037/0003-066X.49.8.709 [PubMed: 8092614]
- Epstein S (1998). Cognitive-experiential self-theory In Pervin L (Ed.), *Handbook of personality: Theory and research* (pp. 211–238). NY: Guilford Press.
- Giorgi A (1997). The theory, practice, and evaluation of the phenomenological method as a qualitative research procedure. *Journal of Phenomenological Psychology*, 28(2), 235–260. doi:10.1163/156916297X00103
- Glaser BG, & Strauss AL (1967). *The discovery of grounded theory: Strategies for qualitative research*. London: Wiedenfeld and Nicholson.
- Hall KH (2002). Reviewing intuitive decision making and uncertainty: the implications for medical education. *Medical Education*, 36(3), 216–224. doi:10.1046/j.1365-2923.2002.01140.x [PubMed: 11879511]
- Hill CE, Knox S, Thompson BJ, Williams EN, Hess SA, & Ladany N (2005). Consensual qualitative research: An update. *Journal of Counseling Psychology*, 52(2), 196–205. doi:10.1037/0022-0167.52.2.196
- Hilsenroth MJ, & Cromer TD (2007). Clinician interventions related to alliance during the initial interview and psychological assessment. *Psychotherapy*, 44(2), 205–218. doi:10.1037/0033-3204.44.2.205 [PubMed: 22122211]
- Hogarth RM (2001). *Educating intuition*. Chicago, IL: University of Chicago Press.
- Horvath AO (2000). The therapeutic relationship: From transference to alliance. *Psychotherapy in Practice*, 56, 163–173. doi:10.1002/(SICI)1097-4679(200002)56:2<163::AID-JCLP3>3.0.CO;2-D
- Horvath AO, & Luborsky L (1993). The role of the therapeutic alliance in psychotherapy. *Journal of Consulting and Clinical Psychology*, 61(4), 561–573. doi:10.1037/0022-006X.61.4.561 [PubMed: 8370852]
- Kahneman D (2003). A perspective on judgment and choice: Mapping bounded rationality. *American Psychologist*, 58(9), 697–720. doi:10.1037/0003-066X.58.9.697 [PubMed: 14584987]
- Kahneman D, & Klein G (2009). Conditions for intuitive expertise: A failure to disagree. *American Psychologist*, 64(6), 515–526. doi:10.1037/a0016755 [PubMed: 19739881]
- Lieberman MD (2000). Intuition: A social cognitive neuroscience approach. *Psychological Bulletin*, 126(1), 109–137. doi:10.1037/0033-2909.126.1.109 [PubMed: 10668352]

- Mattingly C, & Fleming MH (1994). *Clinical reasoning: Forms of inquiry in a therapeutic practice*. Philadelphia: Davis.
- McClelland DC, Koestner R, & Weinberger J (1989). How do self-attributed and implicit motives differ? *Psychological Review*, 96(4), 690–702. doi:10.1037/0033-295X.96.4.690
- Meehl PE (1954). *Clinical vs. statistical prediction*. Minneapolis: University of Minnesota Press.
- Nakash O, Rosen D, & Alegria M (2009). The culturally sensitive evaluation In Ruiz P & Primm A (Eds.), *Disparities in psychiatric care: Clinical and cross-cultural perspectives*. Bethesda, MD: Wolters Kluwer Lippincott Williams and Wilk.
- Qualitative Solutions Research International Pty Ltd. (1998). NVivo.
- Schön DA (1983). *The reflective practitioner: How professionals think in action*. London: Temple Smith.
- Simon HA (1992). What is an “explanation” of behavior? *Psychological Science*, 3(3), 150–161. doi: 10.1111/j.1467-9280.1992.tb00017.x
- Simpson J, & Weiner E (2009). *The Oxford English dictionary*. Oxford: Clarendon Press.
- Stahl JV, Hill CE, Jacobs T, Kleinman S, Isenberg D, & Stern A (2009). When the shoe is on the other foot: A qualitative study of intern-level trainees’ perceived learning from clients. *Psychotherapy*, 46(3), 376–389. doi:10.1037/a0017000 [PubMed: 22122727]
- Stickel T, & Weems C (2006). Improving prediction from clinical assessment: The roles of measurement, psychometric theory, and decision theory In Bootzin R & Mcknight P (Eds.), *Strengthening research methodology*. Washington, D.C.: American Psychological Association. doi: 10.1037/11384-011
- Turner S, Hersen M, & Heiser N (2003). The interviewing process In Turner S & Hersen M (Eds.), *Diagnostic interviewing*. New York, New York: Kluwer Academic/ Plenum Publishers Retrieved from <http://psycnet.apa.org/psycinfo/1994-98622-001>
- Tversky A, & Kahneman D (1974). Judgment under uncertainty: Heuristics and biases. *Science*, 185(4157), 1124–1131. doi:10.1126/science.185.4157.1124 [PubMed: 17835457]
- Westen D (1997). Divergences between clinical and research methods for assessing personality disorders: implications for research and the evolution of axis II. *American Journal of Psychiatry*, 154(7), 895–903. Retrieved from <http://www.psychsystems.net/lab/divergences.pdf> [PubMed: 9210738]
- Westen D, & Arkowitz-Westen L (1998). Limitations of Axis II in diagnosing personality pathology in clinical practice. *American Journal of Psychiatry*, 155(12), 1767–1771. Retrieved from <http://ajp.psychiatryonline.org/data/Journals/AJP/3695/1767.pdf> [PubMed: 9842791]
- Westen D, & Weinberger J (2004). When clinical description becomes statistical prediction. *American Psychologist*, 59(7), 595–613. doi:10.1037/0003-066X.59.7.595 [PubMed: 15491255]
- Zuroff DC, & Blatt SJ (2006). The therapeutic relationship in the brief treatment of depression: Contributions to clinical improvement and enhanced adaptive capacities. *Journal of Consulting and Clinical Psychology*, 74(1), 130–140. doi:10.1037/0022-006X.74.1.130 [PubMed: 16551150]

Table 1.

Summary of Thematic Analysis of Therapists' Implicit Clinical Judgments During the Mental Health Intake

Description of thematic categories and sub-categories	Raw frequency	Percent frequency (out of 129 interviews)	Verbatim example
Themes therapists reported as characteristics of implicit clinical judgments			
Knowledge gained through past clinical experience	83	65%	"It's more like my the clinical intuition, I guess it's clinical knowledge, clinical experience. That comes with years and years of practice."
Attention to nonverbal cues	63	49%	"I just sensed he didn't want to talk about it...just the way he answered things...not looking at me when I interviewed him."
Attention to affective communication	68	53%	"...I can just remember... more affect in what she was talking about and that were the clues to me of explore more openly..."
Themes therapists reported as related to the content of implicit clinical judgments			
Decisions regarding the quality of the rapport	58	45%	"...It wasn't conscious, but I think that, that kind of happens organically because that was about the alliance, keeping the guy engaged."
Decisions whether to trust the patient	55	43%	"I think what helped was my intuition that the information that was being provided by the client was honest"
Decisions regarding diagnostic impressions	93	72%	"What guided my diagnostic decisions was a combination of my clinical intuition and the criteria in the DSM...it was more my level of intuition."
Assessment of depression	73	57%	" She seemed to me that she was somewhat depressed, I don't know, maybe it was more my intuition of me thinking that she is more depressed."
Assessment of psychotic symptoms	54	42%	"...that was like a decision I took in that moment because my impression of the patient was that she was a pretty healthy patient, to say it like this, she did not give me the impression, even though I didn't ask her all of the things that I could have asked her, that she was a patient that could have a psychotic disorder."
Risk assessment	65	51%	"It was a decision that I gave priority to in that moment because the intuitive impression I got from her was that it did not seem like there was a risk factor let's say she seemed like someone who is trustworthy in the sense of being responsible."

Table 2.

Thematic Analysis of Therapists' Report of What was Most and Least Helpful for Their Clients During the Intake

Description of thematic categories and sub-categories	Raw frequency	Percent frequency (out of 129 interviews)	Verbatim example
Themes therapists reported to be most helpful for their clients			
Allowing clients to talk, listen to clients	47	36%	"To be listened to intently and in a responsible manner."
Connecting with services and providing psycho-education regarding illness and treatment option including psychotropic medications	26	20%	"To understand that there are outpatient services to help him with his problem."
Therapist characteristics such as being empathic, nonjudgmental, knowledgeable	13	10%	"Empathy, patience, thoroughness, kindness, nonjudgmental stance."
Completing the evaluation	10	8%	"To evaluate the presentation as thoroughly as possible in an initial interview, and exploring symptoms and different elements of her history including medical history."
Helping clients feel at ease, and comfortable or reassured	9	7%	"Focus on working to help the client feel comfortable."
Giving a sense of hope	8	6%	"The opportunity to start developing a sense of hope about feeling better."
Understanding clients with specific emphasis on emotional states	8	6%	"Validation and empathy of current emotional state."
Having similar ethnic/racial background including speaking the same language	8	6%	"That we spoke the same language because I would be able to understand her in her own tongue."
Themes therapists reported to be least helpful for their clients			
Not being able to collect all the information needed to complete the evaluation	22	17%	"Having to do full psych evaluation at first visit."
Having limited time	18	14%	"I didn't have enough time."
Struggling with systemic constraints such as quality of facilities, wait time for appointment, changing therapists following the intake, and need to use the computer while sitting with the client	16	12%	"The office set-up, including lack of space, computer placement."