Clinical Judgment vs. Actuarial Prediction

Clinical judgment depends on subjective, intuitive impressions obtained in an idiosyncratic manner. Using clinical judgment, two or more professionals can interview the same client independent of each other and their findings can differ substantially.

Actuarial procedures are used in a methodologically consistent manner. Actuarial procedures specify well-defined decision-making rules resulting in consistent findings between two or more professionals using them. An example would be a formula based on MMPI scales to identify malingering.

A 2000 study by Grove and colleagues examined 136 studies comparing the decision-making accuracy of clinical judgment with actuarial procedures. Sixty-three of the studies favored actuarial procedures, 5 of the studies yielded approximately equal levels of accuracy between the two approaches, and 8 studies favored clinical judgment. When the ties are disregarded, the accuracy of actuarial procedures exceeds clinical judgment by a margin of eight to one. Grove and his colleagues reported:

. . . we identified no systematic exceptions to the general superiority (or at least material equivalence) of mechanical prediction. It holds in general medicine, in mental health, in personality, and in education and training settings. It holds for medically trained judges and for psychologists. It holds for inexperienced and seasoned judges. (p. 25)

In other words, actuarial procedures are generally superior independent of the training and experience of the judges. Clinical judgments of more experienced and/or more extensively trained subjects were no more accurate than less trained and experienced judges. Consequently, mental health professionals with substantial training and experience cannot claim that these data do not apply to them.

Grove and his colleagues further stated that relying on clinical interviews decreased the accuracy of clinical judgment.

The only design variable that substantially influenced the relative efficacy of the mechanical- and clinical-prediction methods was whether the clinicians had access to a clinical interview. Alas, clinical predictions were outperformed by a substantially greater margin when such data was available to the clinician. (p. 25)

In seven of the eight studies in which clinical judgment outperformed actuarial procedures, the clinicians had access to more data compared to the actuarial procedure. Quite clearly, then, these comparisons were less than fair and equitable.

Sample Cross-Examination:

1. Dr. ____, there are profound differences between clinical judgment and actuarial assessment – Correct?
2. When interviewing the same client independent of each other, two or more professionals can vary substantially in their findings – Correct?
3. The findings of these professionals frequently vary substantially because their theoretical differences take them in different directions – Correct?
4. One professional may be quite interested in the client’s problems, seeking any evidence of psychopathology – Correct?
5. In a clinical interview, this professional will ask questions consistent with his or her interest in the client’s presumed psychopathology – Correct?
6. Another professional may be more interested in the client’s personality strengths and resources – Correct?
7. In a clinical interview, this professional will ask questions consistent with his or her interest in the client’s personality strengths and resources – Correct?
8. It is not surprising, then, when such professionals report substantially different findings regarding the same client based on a clinical interview – Correct?
9. Unlike clinical judgment, actuarial procedures specify well-defined rules for decision making – Correct?

10. Assume, for example, the following rules for identifying malingering on the MMPI-2: [Copy the four points below on a piece of paper you can hand to the expert].
   a. Check to see if the subject responded in a random manner to the MMPI-2
   b. Check to see if the subject responded in an acquiescent manner to the MMPI-2 (true response set)
   c. If there is no evidence of random responding or acquiescent responding, and
   d. If the F(p) Scale [Infrequency-Psychopathology Scale] exceeds a T-score of 100, rule-in malingering.

**Now my question:** This is an example of an actuarial procedure specifying well-defined rules for decision making – Correct?

11. And if two or more professionals use these well-defined decision-making rules, while independently reviewing the same MMPI-2 data, they will come to the same conclusions regarding malingering – Correct?

12. The journal *Psychological Assessment* is a generally recognized and accepted peer-reviewed journal in your field – Correct?

13. And a study by Grove and his colleagues published in *Psychological Assessment* titled “Clinical Versus Mechanical prediction: A Meta-Analysis” might be relevant to your opinions in this case – Correct?

14. Please assume that Grove and his colleagues analyzed 136 studies that compared clinical judgment with actuarial assessment – OK?

15. Please consider these findings reported by Grove and his colleagues:
   [Read] [Consider copying the quote cited below on a piece of paper you can hand the expert]
   
   . . . we found about half of the studies (N=63; 47%) notably favored mechanical prediction [actuarial assessment], with as many (N=65) yielding equal performance. In contrast only eight studies (6%) notably favor clinical prediction.

**Now my question:** Assume that for comparison purposes, we eliminate the 65 studies “yielding equal performance” – OK?

16. If 63 studies favor actuarial assessment, and only 8 favor clinical judgment, the accuracy of actuarial assessment exceeds that of clinical judgment by a margin of almost eight to one – Correct?

17. You have not published anything in a peer-reviewed journal that necessitates reconsidering the findings of Grove and his colleagues – Correct?

18. You cannot cite anything published in a peer-reviewed journal that necessitates reconsidering the findings of Grove and his colleagues – Correct?

19. These findings challenge your relying on your clinical judgment in this case – Correct?

20. Please consider these additional findings reported by Grove and his colleagues:
   [Read]
   
   . . . we identified no systematic exceptions to the general superiority (or at least material equivalence) of mechanical prediction. It holds in general medicine, in mental health, in personality, and in education and training settings. It holds for medically trained judges and for psychologists. It holds for inexperienced and seasoned judges.

**Now my question:** If the “superiority of mechanical prediction (or actuarial assessment) is true in general medicine, mental health, in personality, and in education and training settings,” this is a broadly applicable finding – Correct?

21. You have not published anything in a peer-reviewed journal that necessitates reconsidering the findings of Grove and his colleagues in this regard – Correct?

22. You cannot cite anything published in a peer-reviewed journal that necessitates reconsidering the findings of Grove and his colleagues in this regard – Correct?

23. These findings also challenge your relying on your clinical judgment in this case – Correct?

24. If the superiority of mechanical prediction (or actuarial assessment) “holds for inexperienced and seasoned judges” alike, this finding applies to you regardless of how experienced you are – Correct?

25. You have not published anything in a peer-reviewed journal that necessitates reconsidering the findings of Grove and his colleagues in this regard – Correct?
26. You cannot cite anything published in a peer-reviewed journal that necessitates reconsidering the findings of Grove and his colleagues in this regard – Correct?
27. These findings also challenge your relying on your clinical judgment in this case – Correct?
28. Please consider these additional findings reported by Grove and his colleagues:

[Read]

The only design variable that substantially influenced the relative efficacy of the mechanical- and clinical-prediction methods was whether the clinicians had access to a clinical interview. Alas, clinical predictions were outperformed by a substantially greater margin when such data was available to a clinician.

Now my question: If “clinical predictions were out performed by a substantially greater margin” when judges relied on clinical interviews, that means relying on clinical interviews decreased the accuracy of clinical judgment – Correct?
29. You have not published anything in a peer-reviewed journal that necessitates reconsidering the findings of Grove and his colleagues in this regard – Correct?
30. You cannot cite anything published in a peer-reviewed journal that necessitates reconsidering the findings of Grove and his colleagues in this regard – Correct?
31. If relying on a clinical interview decreases the accuracy of clinical judgment, your relying on a clinical interview in this case likely compromises the accuracy of your opinions – Correct?
32. Please consider these additional findings reported by Grove and his colleagues:

[Read]

Only one consistent feature emerged in the eight studies in which clinical judgment outperformed mechanical prediction. In seven of eight studies, the clinicians received more data than the mechanical prediction. (p. 25)

Now my question: If “clinicians received more data than the mechanical prediction” in seven of the eight studies demonstrating superiority for clinical judgment, those comparisons were less than fair and equitable – Correct?
33. If those comparisons were less than fair and equitable, it would be mistaken to rely on them – Correct?

It is not absolutely necessary to rely on peer-reviewed journals when asking actuarial versus clinical judgment. Use questions 1-11 above. In addition, ask the following questions:

12. Relying on the well-defined decision-making rules associated with actuarial procedures leads to consistent conclusions from two or more mental health professionals – Correct?
13. But relying on the subjectivity of clinical judgment can lead to very different conclusions – from two or more mental health professionals – when evaluating the same person – Correct?
14. Another mental health professional evaluating the party in this case – and relying on clinical judgment – from two or more mental health professionals – when evaluating the same person – Correct?
15. This court must therefore respond to your clinical judgment with considerable skepticism – Correct?
16. This court must respond to your clinical judgment with considerable skepticism because clinical judgment can misinform and mislead this proceeding – Correct?

Very frequently mental health professionals rely excessively on clinical judgment, and they do so with indifference. The following is the testimony of a psychologist expressing his opinions regarding a custody dispute. This psychologist had not formally evaluated the parents, but had seen them as a “parenting coordinator,” trying to reduce the frequency and intensity of their parental conflicts:

Attorney: Have you reached any conclusions about the mental health of the parties involved?

Psych.: I have not done any testing of either party and my observations are my observations . . . My concern is in regard to the ongoing angst and ire of Mr. Smith and his inability to let go of that hostility. It suggests that there is some underlying pathology. Because I have not done an actual examination, I’m not able to make any definitive diagnosis.
This testimony – “my observations are my observations,” – was less than an appropriate basis for supporting his opinions. He blithely overlooked how his “observations” ultimately amounted to subjective, intuitive impressions. Ultimately, clinical judgment is an unstandardized, inconsistently applied, ad hoc process. As such, clinical judgment is associated with an unknown margin of error that is nonetheless large enough to undermine its evidentiary value.

**Sample Cross-Examination:**

1. In this case, you relied on your clinical judgment – Correct?
2. There is no published resource, detailing well-defined procedures, for applying clinical judgment in a case such as this – Correct?
3. Absent any published resource, detailing well-defined procedures for applying clinical judgment in a case such as this, your use of clinical use amounts to relying on an unstandardized procedure – Correct?
4. The clinical judgments of another professional in this case could be different than your clinical judgments – Correct?
5. If the clinical judgments of another professional in this case are different than your clinical judgments, clinical judgment is inconsistently applied – Correct?
6. You have not developed your own written protocol for how to apply your clinical judgment to a particular case – Correct?
7. Without a written protocol for guiding your use of clinical judgment, your clinical judgments could vary – at different points in time – when evaluating similar kinds of cases – Correct?
8. If your clinical judgments vary – at different points in time – when evaluating similar kinds of cases, clinical judgment is an ad hoc process – Correct?
9. In other words, as an ad hoc process, your clinical judgments are improvised – Correct?
10. Clinical judgment can therefore be defined as an unstandardized, inconsistently applied, ad hoc process – Correct?
11. As an unstandardized, inconsistently applied, ad hoc process, there is an unknown margin of error associated with clinical judgment – Correct?
12. Your relying on clinical judgment in this case therefore threatens to misinform and mislead this proceeding – Correct?