

Clinical judgement vs statistical predictions in research



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The clinical and statistical approaches have both proven to be successful methods in clinical psychology. Each approach has its pros and cons depending on the type of situation that is being dealt with. Clinical judgment can be a complex process because it requires a patient's data which are composed of samples, observations, signs of underlying states and the clinician's responses. According to Sundberg, Tyler and Taplin (1973) clinical interpretation may consist of 3 different levels: Level 1 deals with clinicians being familiar with certain experiences, and therefore, making a prediction based off of that. An example of this would be the SAT or GRE assessments. Level 2 is comprised of clinicians carefully observing a patient's behaviors and coming up with a conclusion based off of the behavior characteristics that the patient displays. In level 3, based off of the individual's determinants in a specific situation, the clinician seeks a consistent understanding. For example, blood responses on the Rorschach test can be a determinant of hidden aggression, which would then lead to future impulsive outbursts or losing control of oneself (Sundberg, Tyler and Taplin 1973). Although both the clinical and statistical approaches have proven to be beneficial, I believe that clinical psychologists should not rely more on statistical predictions and prepackaged treatments than clinical judgment and individual patients.

In addition, with regards to clinical interpretations, there are 3 different theoretical approaches: The first approach is Behavioral and the intention for this is to seek a patient's data based upon both, personal observations and direct reports. The interpretations are largely at levels 1 and 2 (Trull 2005).

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The second approach is Psychometric, and in this approach objective tests are used in order to predict certain criteria, such as predicting success in college or therapy outcomes. The interpretations in this approach are also at levels 1 and 2 (Trull 2005). Alfred Binet is a great example of a person who was able to display psychometrics through his work because he introduced the first modern intelligence test that tested higher psychological processes. Once a person is tested, it is interpreted by using scores or certain categories. Norm-referencing is a common tool used to describe a large group as a whole as a result of behavior in terms of norms. The final theoretical approach is Psychodynamic. In this approach, clinicians seek to find the inner states of mind or the unconscious. Data is collected through projective tests and unstructured clinical reviews and the interpretations fall on level 3 (Trull 2005).

The clinical and statistical approaches are both effective methods in clinical psychology. Their effectiveness varies upon the type of situation that a patient is being measured in. The quantitative or statistical approach puts more emphasis on objectivity (Trull 2005). Numbers are most important in this approach as formulas and statistical models are used as reference to make decisions. It also enables clinicians to determine the correlation between any two characteristics. It is important that clinicians keep careful records of observations and test data because this data can then later be judged and quantified. Although the statistical approach is able to quantify clinical interpretations, a flaw in this approach is that it does not involve clinical decision-making. The quantitative approach is most effective when the outcome to be predicted is known and specific (Trull 2005). When

clinicians are predicting large populations, the percentages of predictions as a whole are more important than the performance of any one individual. A perfect example of this approach that Trull (2005) states in the book is predicting grades of incoming college freshmen by using objective data of high school grades along with ability test scores. These can be good indicators of future college-level performance. Although the statistical approach can be seen as beneficial, it could be criticized and rejected by clinicians for ethical reasons and a lack of profound indices.

In contrast, clinical psychologists should rely more on the subjective or clinical approach because it offers beneficial interpretations and predictions based off of individual cases. However, clinicians must be extra careful with the information that they take in from patients because they are sort of acting as detectives who make inductive and deductive generalizations that link the observations together. The clinical approach is much more effective when the sample is relatively homogeneous. An example that Trull (2005) gives in the book is when he mentions how a formula that selects students from graduate training would be more helpful in discriminating among students selected if it included clinical judgments regarding motivation or personality features. In addition, another important aspect of the clinical approach is that clinician's serve as data gatherers. Clinicians collect data on a patient's life history because that data may be helpful in the future in predicting whether or not the patient could be prone toward participating in for example, violent sexual assaults against women (Trull 2005). With regards to comparing both the clinical and statistical approach, Meehl (1954) came to the conclusion that based on his surveyed studies, statistical

predictions made were approximately equal to or superior to those made by the clinician. Meehl first came to this conclusion by first stating three ground rules that should be used in order to compare clinical versus actuarial judgment: His first rule states that both methods should draw from the same set of data. His second rule was that in order to stray from using variation pertaining to the data set, cross-validation should be required. His last rule states that there should be explicit prediction of success, recidivism, or recovery. Based on his results, out of the 16 to 20 studies that he looked into, every single one of the cases that had predictions made by actuarial means were greater or equal to clinical methods. What was truly significant about his discovery, however, was that he would eventually go back and change his mind about the only case that went against his overall findings.

Sawyer (1966) also came to the conclusion that both methods complemented each other because he was able to discover that the clinical method is also useful in collecting data because of its ability to provide an array of characteristics that normally would not be available by the statistical approach. With more information of about certain characteristics about a person, that only makes it more helpful when combined with the statistical approach afterwards.

When clinicians move from data to interpretation to prediction it is important to keep in mind that sometimes mistakes will be made or variables will be left out. Garb (1998) mentions that the performance of clinicians can be improved by being aware of the following factors: Information processing can be difficult to integrate due to the volume of data that clinicians take in.

Therefore, it is crucial that clinicians stray from oversimplifying patients who <https://assignbuster.com/clinical-judgement-vs-statistical-predictions-in-research/>

are particularly complex. The reading-in syndrome deals with clinicians having the tendency to over-interpret a patient's symptoms by placing their emphasis on negative symptoms as opposed to positive ones. Validation and records is when clinicians fail to record interpretations and predictions, making it easier to remember the correct ones. Comparing views with colleagues can alleviate this issue. The issue with vague reports, concepts, and criteria is that clinicians tend to be vague with psychological reports, which makes it difficult to tell if their judgments are correct. To solve this issue, Garb (1998) suggests that they use structured interviews and ratings scales, objective personality tests, and behavioral assessment methods. The effects of predictions are other common errors because they may influence the behavioral situations themselves. Prediction to unknown situations is when clinicians are not sure about situations that they may be predicting about a patient and make wrong judgments based off of them. Fallacious prediction principles are when intuitive predictions lead to error due to ignoring the logic of statistical prediction. This issue arises because intuitive predictions often fail to consider regression effects and ignore base rates (Garb 1998). Lastly, the influence of stereotyped beliefs is another common error that can come up because it can be really easy to just attribute a certain characteristic on someone without taking the time to think about it. Clinicians need to be vigilant about the tendency to clinically judge based upon certain diagnostic signs or a demographic group.

In conclusion, the clinical and statistical approaches in psychology can be beneficial to clinicians depending on the types of situations or specific areas that are being observed. As I mentioned earlier in my paper, the statistical

method is useful when results are large and from heterogeneous samples and when they pertain to objective and specific areas. The clinical approach is beneficial in circumstances where situations are unforeseen rendering statistical tests moot. In addition, they are also useful when the interest in an individual case is high. Due to each individual being different and unique in their own way, I believe that clinicians should not rely heavily on statistical predictions and prepackaged treatments as opposed to clinical judgment and individual patients.

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