

Type 1 and type 2 errors

Psychology



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Type and Type 2 Errors In recent years, there has been an increase in lead poisoning litigation. This is attributed to the increase in awareness of the effects of lead toxicity on the development of an infant and how it affects their mental functioning. Such litigations require proof of the existence of lead poisoning. Therefore, forensic evaluators face the challenge of providing proof that indeed an infant suffered from lead intoxication. The research study examines how defense psychiatrists frequently end up giving infant plaintiffs a clean bill of health during lead poisoning cases. In the study, psychiatrists administer a standard neurological examination on participants with the aim of testing their cranial nerve functioning (Dyer, 1998). The participants are all infants and the first procedure for the examination includes exposing them to odiferous substances and cross-examining them if they can identify such substances. Other processes include imitation of movements such as frowning, application of pinpricks, and the examination of ptosis. It is observed that an infant passes all the procedures and the psychiatric report indicates “cranial nerves grossly intact.” However, an overwhelming number of the participants may be showing signs of hyperactivity (Dyer, 1998).

The study above reports the possibility of Type II error because the psychiatrist has provided the correct diagnosis. The cranial nerve function of the infant is intact but the child exhibits some obvious learning as well as behavior problems (Jackson, 2008). The consequence of making a type II error is that the infant plaintiff may be denied justice because the forensic evaluator may fail to recognize learning and behavioral problems. However, it is rather to commit Type II error than Type I error. This is because the null hypothesis is not rejected and therefore, no conclusion is inferred. On the <https://assignbuster.com/type-1-and-type-2-errors/>

hand, committing Type I error is very serious because the null hypothesis is wrongly rejected and a wrong conclusion inferred (Pyrek, 2007).

References

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Pyrek, K. (2007). *Forensic Science Under Siege: The Challenges of Forensic Laboratories and the Medico-Legal Death Investigation System*. Chicago: Academic Press.