Errors - DNA.docx

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Assignment

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Overview:

The article summarizes the importance of various error types - instrument error, statistical error and method error as an error has different types of meanings - statistical error and scientific error which confuses the practitioners in Forensic and people in courts such as lawyers and judges (Christensen et al. 2013). The importance of these Errors gained its importance after Daubert guidelines and increased with the information of The National Academy of Sciences. (Christensen et al. 2013)

The job of science inside the legal framework is not all that much; in any case, the center has moved to incorporate the assessment of strategies and methods Instead of basically the master's elucidation of the outcomes. Guessing the validity method and knowing how the error is happened considered more important irrespective of the decisions made in court. "Error can be defined as an act, assertion, or belief that unintentionally deviates from what is correct, right, or true; the condition of having incorrect or false knowledge" (Christensen et al. 2013) exactly stated in the same way in the article. According to the article, Error may be the difference between the measured value and the true value. (Christensen et al. 2013).

The Daubert criteria were expected to give rules to conceding logical master declaration to guarantee its firm quality and legitimacy (Christensen et al. 2013).To accept the testimony the following rules were made based on the type of error rate, whether it's tested scientifically and accepted in the community (Christensen et al. 2013).

In Daubert decision, the importance of Reliability is used to mean how different viewer's measures the same occurrence differently with different measures based on the view type (Christensen et al. 2013). For gaining correct result when a particular method and statistics given Validity is crucial as it gives the

ease of getting correct results more when compared with the ease of being wrong (Christensen et al. 2013).

The article claims that Error may be by a human which may be intentionally or un-intentionally (Christensen et al. 2013). Practioner error may cause due to inability to apply the method properly, improper use of equipment, it's hard to catch the type but can be reduced by training and repeating the same with nullifying the errors, maintaining the high standards (Christensen et al. 2013). Instrumental error defined as the difference between the measured value that the instrument shows and the actual value (Christensen et al. 2013). The statistical error is the difference between the original and expected value (Christensen et al. 2013).

Misuse of error has three zero in the error rate for technique and error rate is not estimated & happened because of improper training, misunderstanding of the error (Christensen et al. 2013). To provide a valid method in science the practitioners produce a valid and reliable method to understand the importance of error and should consider the lawful setting as judges and legal counselors ordinarily don't see how mistake rates are inferred or the unpredictability in isolating errors from vulnerability (Christensen et al. 2013). As scientific researchers, we should be worried about the clearness, dependability, and legitimacy of our strategies (Christensen et al. 2013). Due to our contribution with the legitimate framework, we should be active in educating the legal community about the different types of errors and should be ready to face the errors (Christensen et al. 2013). Which can best be practiced by guaranteeing that we comprehend, recognize, what's more, convey strategy confinements and potential wellsprings of the blunder in our examination and scientific investigations (Christensen et al. 2013).

Part – B

The definitions and the concept of Errors were clearly explained in the article it has not explained the flaws that Daubert ruling possess like how the importance of Error in Forensic science went through, gained momentum and how it intensified in National Academy of Sciences. The results of making error in Forensic Practise was also clearly explained in the following article (2) which additionally strengthen the article. The given article is still relevant in giving an idea of what an error is, different types of Errors that happen and estimate in forensic practise. The recent article which I searched **"REPORT TO THE PRESIDENT Forensic Science in Criminal Courts: Ensuring Scientific Validity of Feature-Comparison Methods"** (2) also explains the importance of scientific validity and reliability of forensic feature in courts, and their comparison methods and evaluation of errors in scientific validity for seven feature comparison methods such as single, complex mixture sample DNA analysis, Bite-marks, Latent fingerprint analysis, firearm, footwear, hair analysis, showing the complexity of errors that happen while applying in forensic science which supports the article and an extension to the given article. This also strengthen the given article. The link (3) **The Speaking Of Error in Forensic Science** from Nist also conducts conferences in United States to tackle and teach the ways to minimize the errors in Forensic science management. It also suggest to respond to error as "accountable" rather than treating it as "blame" (3), because we cant find the roots of error when we can't treat it as transparent and full disclosure which further boost up the given authors (1) view . So both searched articles (2), (3) give the further extension of the given authors view and also clearly explains the problems of error in real context in Forensic practise.

References:

1. Christensen AM, Crowder CM, Ousley SD, Houck MM. Error and it's Meaning in Forensic Science. Journal of Forensic Sciences. 2014 [Internet] [accessed 2019 Jan 26]; 59(1):123–126. doi:10.1111/1556-4029.12275. Available from: https://fleming.desire2learn.com/d2l/le/content/95117/viewContent/1112832/View?ou=95117

2. REPORT TO THE PRESIDENT Forensic Science in Criminal ... [NA] [date unknown] [Internet] [accessed 2019 Feb 4]. Available from: https://obamawhitehouse.archives.gov/sites/default/files/microsites/ostp/PCAST/pcast_forensic_science_report_final.pdf

3. Press R. Speaking of Error in Forensic Science. NIST. 2018 Jan 8 [ND] [date unknown] [Internet] [accessed 2019 Feb 4]. Available from: https://www.nist.gov/news-events/news/2017/09/speaking-error-forensic-science

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GRADEMARK REPORT

FINAL GRADE

/40

GENERAL COMMENTS

Instructor

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GRADING FORM: RUBRIC TECH SUMMARY/REVIEW

KOUSHIKKUMAR DIGUVA

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OVERALL

<500 words, proper grammar, spelling, verb tense, BTF checklist and rough draft complete

REFERENCING

Intext referencing used consistently in proper format, all references at

the end are in proper format, all references match intext and reference list. Format and references are done following CSE style. All sections that require an intext reference are done correctly.

SUMMARY

Complete summary of key points and main ideas from the article, shows a complete understanding of the article and not missing any components, follows a logical sequence and not repetitive, a very clear distinction between a summary and review. Written so it is clear concise and accurate - not confusing or not using words that do not make sense

REVIEW

Picked a key point or idea from the article to focus the review on, not just repeating what was covered in the summary, uses other literature or references to back up their ideas, follows a logical sequence and flow with main point(s) easily identifiable and not covering too many points.